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SYDNEY: SATURDAY, OCTOBER 30, 1920.

No. 18.

IMPRESSIONS OF NEW ZEALAND FROM A MEDICAL PRACTITIONER'S POINT OF VIEW.¹

By E. G. Blaxland, M.R.C.S. (Eng.), L.R.C.P. (Lond.),
Sydney.

It was not till on my way back to Sydney, while spending a few days in Wellington, after a fairly comprehensive tour of New Zealand, that the idea occurred to me that the members of the New South Wales Branch of the British Medical Association might be interested in a paper setting out some of my impressions. Accordingly, soon after my return to Sydney I approached Dr. Todd, who received my proposition with kind encouragement.

I have since felt and still feel very doubtful about the propriety of taking up your time with a paper so devoid of scientific or practical value and must apologize for any shortcomings or inaccuracies in my humble effort. I went to New Zealand for change of air, scene and environment; had I set out on my travels with a view to writing a paper for a medical society I might have been able to deluge you with a mass of facts and statistics. As a matter of fact, I decided at the outset to avoid "shop" as much as possible and even had an idea of dropping the prefix "Dr.," but soon found that such would not have been a wise course. Though it was late in the touring season when I started, everything was tremendously crowded, hotels, trains, motor coaches and steam-boats, and booking in advance by telegram or telephone was very necessary. I found that there was much virtue in the word "doctor." There still remains, even in New Zealand, that feeling (shall I say) of mingled fear and affection for our profession. I found that I received more consideration and got accommodation more easily than many of my travelling companions.

My journeyings were so far and so frequent and my stays in the cities so short that I had very little opportunity of seeing much of hospitals or medical men, consequently my impressions with regard to them are of a most fragmentary nature.

General Impressions.

At the first sight of New Zealand I was impressed with the great difference between the coast-lines of New South Wales and New Zealand. Steaming down towards Auckland, one sees a coast-line rugged, volcanic, broken into many islands, very beautiful; and more beautiful as one approaches the harbour, sandy beaches, a splendid harbour, a picturesque city, set in a wonderful bit of country, with extinct volcanic cones everywhere.

At the very first entry into Queen Street, one might easily imagine oneself in George Street, Sydney. Auckland gives one the impression of being a very prosperous and go-ahead city and, after seeing all the others, likely to remain the foremost city of New Zealand, as it is evidently capable of much greater expansion, the country surrounding it, more especially to the north, being the most undeveloped of any. Its

government is evidently of this opinion, as an immense amount of money is being spent in extending the shipping accommodation. I found the climate enervating and relaxing. I tired easily, though the weather was not hot.

From Auckland I went to Rotorua—a town managed entirely by the New Zealand Government, whose representative takes the place of a mayor—apparently the place of exhibition of the Maori people, as well as the centre of the most wonderful thermal springs in the world. Next to these, I was impressed by the constant sulphurous smell of the atmosphere and the luxuriant growth, wealth of bloom and the great variety of the flowers growing in the bath gardens. It is an extraordinary thing to see poppies, asters and pansies blooming together in the month of February. The head gardener expressed the opinion that the abnormal growth of flowers is due to the atmospheric conditions. One is consequently led to wonder whether these atmospheric conditions have any effect on human life in the vicinity. There is no doubt that the Maoris have a most marked appearance of well-being, but this may be due to the fact that they lead a good life; they live well. They follow the old adage of "laugh and grow fat"; they are great laughers.

A word about the Maoris might be in place here. I make no claim to have studied them as a race, but was impressed by the way they are treated by the Government and the white population. They are made much of, one might say spoilt and pampered. The terms of the Waitangi Treaty, made so many years ago, are strictly adhered to. They still own a large amount of territory, much of it practically unproductive. This condition of affairs is a bar to the progress of the country. Of course, you all know that there are many of great intellectual capacity, occupying leading positions in politics, medicine, law, etc.; many of them are wealthy, but, as far as I could gather, none of them has a great capacity for work, this condition being, no doubt, due largely to their communistic mode of living and to the fact that so many of them are property owners. They say that the ordinary Maori will not work while he has money. Travelling down the beautiful Wanganui, we passed many small settlements and camps. Only the children paddle their own canoes; the big ones were propelled by petrol engines. The different types of faces one sees are interesting; some have regular, aquiline features, some are almost negroid and there are some of quite a Malay type, with slanting eyes. I travelled with a man who knows some Malay and who learnt some Maori in his youth; he said that there are many words almost identical in the two languages. There is legendary evidence that the Maoris came from Paratonga in the year 1350 and there are links in the languages all the way through the Pacific, from Malay to New Zealand. A curious feature about the race is that in nomenclature and wood-carving the lewd or sexual idea is always prominent; on one occasion our coach-driver was asked by a lady tourist the meaning

¹ Read at a Meeting of the New South Wales Branch of the British Medical Association on July 30, 1920.

of the name *Whakarewarewa*; he said he would not like to say and that nearly all the Maori names of places are "smutty." From this one might suppose that their morality was of a low order and that they would be likely to become a degenerate race. The reverse of this is the case, their moral code being of the strictest. Although their numbers have decreased, they seem to have resisted the advent of civilization more successfully than most aboriginal races and are inter-marrying freely with the white population, producing a progeny of marked virility. They are very fond of alcohol and beer and seem to be able to deal with large quantities with great success. I was told by a lay individual that tuberculosis is "raging" amongst them, but I neither saw nor heard anything to corroborate this statement.

Maori Carvings.

I was greatly interested in the Maori carvings, the best examples of which are in the Auckland Museum. The art seems to be hereditary, but is now almost a lost art. There are now very few carvers and these are very inferior artists; it is difficult to get them to work. It is said that the carvings have been done with steel implements for nearly 300 years. Before that, stone implements were used. Examples of stone carvings, which are the most beautiful and valuable, are rare. The photograph which I pass round, is of a piece sold about thirty years ago to Sarah Bernhardt for £100 and there were some heart-burnings over the fact that it was allowed to go out of the country. A very fine set was recently discovered and is now in the Auckland Museum.

Rotorua Spa.

My time in Rotorua was all too short. I had hoped to return there, but found it impossible. There is material enough for a paper on Rotorua as a spa, but I was able only to go very superficially into the matter. I must confess a profound ignorance of balneology and spa treatment generally. To the visitor to New Zealand, Rotorua as a spa might be considered to bear the same relation as the continental spas do to the English visitor. The change of environment, so often one of the most essential aids to treatment, is marked, the presence of the Maoris everywhere supplying the foreign element, the scenery, the climate, the atmosphere, all combining to help in this direction. As for the mineral waters, it is claimed that there is no spa in the world so rich in mineral waters covering so wide a range of therapeutic possibilities. There are alkaline siliceous waters with many minor differences of chemical composition; sulphuric acid springs, said to be unlike anything else in the world; mud springs containing silicates and free sulphur, steam vents, some mixed with sulphuretted hydrogen, some with sulphurous acid and springs with free carbonic acid gas, so that one may get hot mud straight from the springs and hot vapour straight from the vents. Many of the mud and water springs have been found to be slightly radio-active. Wonderful results are claimed in the treatment of gout, rheumatism, sciatica, neuralgias and anaemia. Dr. Duncan informed me that he has been getting very good results in rheumatoid arthritis, but I had no opportunity of

inquiring into the methods of treatment. I was shown over the bath house by the Secretary and noted that the methods of treatment were very varied—many kinds of baths, used in many kinds of ways, douches, massage, electricity, both light and current, hot air, X-rays, orthopaedic apparatus for stiff joints, the stationary bicycle, row-boat, nautical wheel, etc. The buildings are magnificent, extensive and luxuriously fitted and the grounds contain numerous tennis lawns and bowling greens. At the Rotorua Military Hospital there were extensive additions being built and by now probably finished, to enable returned soldiers to have prolonged spa treatment. The scheme seems to be gradually to congregate there all the patients from the other military centres requiring further treatment. All this thermal spring country is intensely interesting. At Weiraki, some distance from Rotorua, there is a beautiful little valley, whose stream is all hot, supplied by springs forming lakelets and pools, of the most wonderful and varied colours. The waters are said to be of even more varied chemical composition than those at Rotorua. When the stream reaches the Weiraki Hotel grounds, where it is dammed up, forming a large bath, it is a semi-opaque, grey colour, warm and delightful to bath in, having the oily feel so often met with and a very faint sulphurous smell. This creek forms the only baths possessed by the hotel. High up in the valley are the ruins of a bath, which was built and used for treatment many years ago by a German doctor; one wonders how he got his patients to the spot. The Weiraki Hotel is being formed into a company with a capital of £100,000.

I will not take up your time with a description of my tour, but will proceed with a few impressions of the people and their Government. As regards the people, I was not at first struck with any great individuality or special type, but as I travelled, more especially in the south island, I noticed that there are a great many big, fine-looking young men and that the boys of the numerous boarding-schools are mostly very well developed.

I was impressed with a superiority of manners and speech in all classes. There is no noticeable "colonial" accent and the working classes express themselves in well-chosen and grammatical language. The diction of the upper classes is very near to what obtains in the English upper classes. In fact, amongst the young ladies there appears to be a cult or affectation of an ultra-English accent. I met with it frequently in the hotel lounges.

I noticed very little drunkenness, very little obscene language (the worst example was from a Maori), almost no evidence of poverty; on the contrary, wherever I travelled I saw nothing except evidence of prosperity, habitations clean and well kept. The housing problem is fairly acute in the cities, especially in Wellington, where one hears so much talk about the slums and the crowding of the population. I saw these slums in the company of a Plunket Society nurse and would not class them as such. There was evidence of crowding and great difficulty in getting accommodation, but, as far as I saw, everything was neat and clean. One gets the impression that New Zealand is extremely prosperous; perhaps

some political economist among you can explain how this is, seeing that the national debt is *per capita* by far the highest in the world, something over £130. Against this, I believe the individual wealth is about the highest in the world.

Government Institutions.

I come now to the Government. Early in my travels I made the remark, the originality of which I much doubt, that New Zealand is a country which prospers on account of its Government, Australia one which prospers in spite of its Government. The one great point that impresses a visitor is that decentralization has been encouraged in every way and is no doubt a great factor in the prosperity of the Dominion. The very apparent importance and self-reliant condition of the numerous out-lying towns, both coastal and inland, is remarkable. There is no doubt that this condition of affairs, though favouring the prosperity of the country districts and the country as a whole, is detrimental to the rapid extension of the chief cities and renders them less attractive to the pleasure-seeker than might otherwise be the case.

I had very little opportunity of studying the politics of the country, but met some of the legislators and was impressed with the idea that they are legislators, not mere politicians. Their party warfare I did not quite grasp, but gathered that the Labour Party, though not holding great power in Parliament, was apparently a power in the land, labour problems being just as acute there as here.

I was fortunate in making the acquaintance of the new Minister for Health and Education, Mr. C. J. Parr, a few days before leaving Wellington; a barrister by profession, having retired in order to devote his whole time to politics. I was impressed by his enthusiasm and grasp of affairs. At the annual meeting of the Plunket Society, at which I had the privilege of being present, Dr. J. E. Elliott, a member of the Health Board, who was in the chair, voiced what I presume is the opinion of the medical profession over there, *viz.*, that the Minister for Health should be a medical man, or, failing this, that the Director of Health should have more power. This is a question which, no doubt, has exercised the minds of many of the profession in this country.

While I was preparing this paper, a paragraph appeared in *The Medical Journal of Australia*, giving an account of a report of a Committee of the New Zealand Branch of the British Medical Association on the establishment of a national medical service. I knew, when I was in Wellington, that nationalization was in the air, but did not think that it was so near reaching a concrete form. It is not within the scope of this paper to discuss this subject; the report, no doubt, will be available to all of us. To me it seems curious that the British Medical Association should make the first move in the matter.

With regard to the administration of health, hospital and education matters, it appeared to me that these are correlated more than is usually the case. There is no doubt that they have been very thoroughly studied by successive governments and the methods to promote the welfare of the people would almost seem to have been over-elaborated by acts and institutions. Notwithstanding this, Mr. Parr pro-

poses to bring in immediately new legislation in this connexion.

Public Health Administration.

Public health administration has for many years held a very prominent position in the Government of New Zealand. In 1908 a very complete Act was passed, to consolidate all matters in this connexion and since then amendments have been added. The Health Department, now most ably presided over by Dr. Valentine, is a very live part of the Government. The whole country is divided into definite health districts, each presided over by a District Health Officer, who must be a medical man with special knowledge of sanitary and bacteriological science and who, except under special circumstances, is not allowed to engage in private practice. I think I am right in saying that the district health officers have greater powers than those occupying similar positions in New South Wales; subordinate to them are specially trained health inspectors. (An almost identical scheme is contemplated by the health authorities of New South Wales, I believe only in abeyance through want of funds). It was not till 1918 that an actual Board of Health was constituted. On this Board there are five *ex officio* members, the Minister (chairman), the Chief Health Officer, the President of the New Zealand Branch of the British Medical Association, the Dean of the Faculty of Medicine of the University of Otago and the officer in charge of local government and five other members appointed by the Governor in Council. There are also sometimes appointed district advisory committees, composed of the District Health Officer (chairman), the President of the local Division of the British Medical Association and other members appointed by the Minister. Sanitation is under very strict surveillance, as also are food and milk supplies. Though legislation with regard to the latter has been very carefully thought out, the administration does not fully meet with the approval of the medical profession. Sewerage schemes of some sort are very general all over both islands, even in the smallest centres. These are possible, on account of the splendid water supplies that exist nearly everywhere. Measures for prevention and notification of infectious diseases are very elaborate and carried out with strictness, the notifiable diseases being about the same as those in New South Wales. They are rightly proud of their very low death-rate; but this is, no doubt, very largely attributable to the climate.

The Hospitals.

The hospital system is of great interest. I will not attempt to go very deeply into it, but will endeavour to give a few salient points of the scheme for the management of hospitals generally.

The whole system is conducted under the very elaborate *Hospitals Act* of 1909, which has been amended from time to time up to the year 1919. I gathered some impressions from it and from information received, the points of greatest interest are the methods of finance and management.

For the purposes of management the whole of New Zealand is divided into Hospital Districts, under the control of the Minister for Health and Education. Each Hospital District has its hospital, which is managed by a board, the number of members being regulated by the population and size of the district. Each

district is divided into contributory districts, which elect members to the board. Ratepayers only have votes at these elections, which, I believe, are annual and are taken very seriously; as any candidate who does not receive a certain number of votes has to forfeit a sum of money. I think I am right in saying these elections generally result in obtaining very capable boards and that it is considered a great honour to be a member. The boards have very considerable powers, in some instances subject to the approval of the Minister. They can borrow money, make grants to, or subsidize nursing associations, benevolent institutions or private philanthropic institutions, appoint district nurses and inaugurate and manage charitable institutions of all kinds. I think I am right in saying that there are no medical men on these boards, or, if there are, it is exceptional. I know there is none on the Wellington Hospital Board. The Medical Superintendent attends all meetings and he told me that the board always gave the greatest consideration to his recommendations. It might appear that the hospitals are too much under municipal control, but this, I believe, is not the case. The system, no doubt, approaches nationalization, but apparently works very well.

The financial system also seems to be very sound. In every hospital district there is a hospital rate, paid by every ratepayer. I believe this is subsidized by the Government to the extent of sixteen shillings to the pound sterling. All contributions and subscriptions in money, land or property are subsidized 24 shillings and all bequests ten shillings to the pound sterling. The result of this generous financial endowment is that one never hears of hospitals going about begging for funds, nor being in dire financial straits. Occasionally the public is called upon to aid some big effort, such as was being proposed in Auckland when I was there, and generally it responds generously and quickly.

The rules governing the nursing profession, their work and training, are very complete and stringent as regards the hours of work. In all hospitals of 100 beds and over there is an eight-hour system, or a maximum of 56 hours weekly. All the large hospitals have good nurses' homes, that in Wellington, which was the only one I saw, being a very fine building, commodious and well-equipped. The regulations controlling private hospitals come under the *Hospitals Act*. These do not seem to have reached such an advanced state of excellence as in Sydney and Melbourne. This is evidently felt most acutely in Wellington; one medical man, in a semi-public utterance, expressed the opinion that there should be a private hospital in connexion with the general hospital, in order that the rich might be on an equality with the poor in availing themselves of the best appliances and treatment.

There is a distinct scheme of maternity hospitals, which was instituted by the late Richard Seddon. They are called St. Helens Hospitals, named after Mr. Seddon's birth-place. There is one in every city and many of the larger towns; they are gradually being established all over New Zealand. They exist not so much as charitable institutions as a means to promote the welfare of women and children and

training schools for midwifery nurses. They are under the control of the Hospital Boards. There is a wage limit for patients of £4 a week and a charge of 30s. a week. They are in charge of a trained matron and a trained and probationary staff. There are no honorary medical officers, but a paid medical officer, who attends at stated times to examine expectant women and attends confinements when sent for by the matron. They are devoted entirely to confinement work and the nurses attend outdoor cases. I did not hear of any hospitals for the treatment of diseases of women solely.

I paid very short visits to the hospitals of Auckland and Christchurch, but spent an interesting hour or two with the Medical Superintendents of the Wellington and Dunedin Hospitals. Wellington Hospital is in the near suburbs, well situated in roomy grounds, but what appears to be an error in construction has been made. There is a high administrative block on the northern side, facing the gardens, keeping the sunlight from the wards, which abut on a lane at the back. This defect has been remedied in the new King Edward Children's Hospital, which is complete in itself and attached to the main buildings and has an interesting history. Over the entrance of the first ward approached is inscribed in large letters, "The Hugh Ward Ward." Some nine or ten years ago it was determined that there was urgent need of a children's hospital. Mrs. Wilford, a very public-spirited and beneficent lady, was interesting herself in the matter; at the same time a theatrical company was performing in the city and was accused by the press of producing plays of a doubtful nature, aiming at nothing but getting away with some of Wellington's money. This roused Mr. Hugh Ward, who immediately set to work in his characteristic manner and with the aid of Mrs. Wilford and the Mayor, in a very short time raised a sum of over £7,000. This amount, with the Government subsidy, realized the sum of over £16,000 and the building was immediately started and opened in March, 1912. The wards are well built; there is plenty of light and good verandah space. I was struck with a beautiful decoration on the walls, in the form of pictured nursery rhymes done in Doulton tiles. These were purchased with a surplus of £800 which remained after the buildings were completed. Incorporated with the Wellington Hospital and situated in the grounds are hospitals for incurable, advanced phthisis and infectious diseases, a complete dental department with a whole-time dentist, a pathological laboratory under combined hospital and Government control, special sick quarters with isolation wards for nurses. The Hospital has its own carpenter, plumber, painter, baker and butcher. The operating room arrangements are very complete; I specially noted Down Brothers' hot-water operating tables and a "No Shado" light, a circle of electric globes set very close together about 180 cm. in diameter. A remarkable point about the Hospital is that there are no honorary assistant surgeons and physicians. All outpatients are seen by the resident medical officers and the Medical Superintendent; the latter does many of the urgent major operations. You can imagine that the life of the Medical Superintendent is an

extremely strenuous one. It seems to be the custom in New Zealand for medical superintendents to hold office for long terms; one occupant at Wellington held office, I believe, for 21 years. The present occupant is a young man named Woodhouse, who gained distinction at the front (I believe the V.C.) and whom some of you may have met at the front. I gained the impression that, considering the comparative smallness of the population, Wellington's hospital service is most extensive, complete and up-to-date. Specialization has not reached the same status as here in Sydney, but there is no doubt that much good work is being done.

Dunedin Hospital, which is the only teaching hospital, has for its vestibule and administrative block part of an old exhibition building. The wards are large and pavilion in construction; the cement floors struck me as being very cold in Dunedin. The outpatient departments are complete in all details, not palatial in construction, but admirably adapted for teaching purposes. I was shown over the Hospital by Dr. Falconer, who has held the position of Medical Superintendent for 15 years, a man devoted to the organization of the Hospital and keen on every detail of its management.

A lot of space is devoted to military patients and the work in this connexion is worthy of note. Most impressive is the work of the orthopaedic and facial and jaw sections. I do not know whether all such work is done there, but, if not, the majority of the cases gravitate there.

The orthopaedic section is in charge of Major J. R. White, who was in Europe studying the subject when war was declared. I believe there are about 80 beds for this section, as well as an auxiliary hospital, where after-treatment is carried out, such as massage, electrical treatment and muscle education. From thence the patients are sent on to the outpatient department and by this means are kept circulating. They do not occupy the hospital beds for too long a time. I did not see many of the cases, but the impression gained was that a large amount of splendid work was being done, more especially in operations for osteomyelitis, bone grafting, arthroplasties, nerve and tendon work and Albee's operation for spinal curvature. Excellent results are claimed and no doubt are obtained.

Dr. Falconer said that many men who had been returned early in the war and had been considered incurable, are now treated with excellent results, but the results might have been much better had the patients been taken in hand earlier.

The facial and jaw section is in charge of Lieutenant-Colonel H. P. Pickerill, who was in charge of the New Zealand Section of the Queen's Hospital, Sidcup. I did not see any of the operations, but saw several of the cases in their different stages, such as tube flaps, rhinoplasty and bone and cartilage grafts. In both these sections most careful records are being kept by means of photographs, drawings and casts. I was greatly struck with the cast work in connexion with the face and jaw section. The man who does the work is an artist. They are making a special collection of these records for the Medical School Museum. It is proposed to continue both

these departments after the war cases are finished.

I did not go round either the Auckland or Christchurch Hospitals. The former is the largest in New Zealand and splendidly situated. There are about 500 beds and though the buildings are somewhat old comparatively, the Hospital has been kept up to date by additions and improvements and the acquisition of the latest equipment. It has a large honorary and resident staff. The latest addition is a children's hospital of 80 beds and is a very fine example of hospital architecture. I was told that the board has in contemplation the expenditure of £150,000. Christchurch Hospital is also a fine one, with splendid pavilion wards.

State Children.

The industrial school system and general care and education of State children seemed to me to be very complete. I was fortunate in meeting Mr. W. T. Beck, the Officer-in-Charge of this Department, a man most enthusiastic in his work. It would appear that there is very little chance of a New Zealand child going very far astray. I do not know whether the Act governing these matters is very superior to those of other British countries, but its scope seems to be very far-reaching and its methods very direct. The police have power to bring before the nearest available magistrate, without a warrant, any child that apparently comes within the scope of the Act. Parents also may take uncontrollable children before a magistrate without a warrant. These, as well as children convicted of punishable offences, are sent to industrial schools. There is also a system of foster homes to deal with illegitimate infants under 6 years of age. These are private licensed homes. There are receiving homes in every centre and from there the children are distributed to the foster homes, apparently much the same as our boarding-out system. One weak spot seemed to me to be that very little provision is made to deal with mothers with illegitimate children. This work is carried on to a certain extent by the Salvation Army. There is one institution of which Mr. Beck is very proud, *viz.*, the Kohitere Training Farm School. This is the only institution that is absolutely self-supporting. I think Mr. Beck told me that the annual profits are £5,000. Here all the really bad and incorrigible boys are sent; there are masters who teach trades and all branches of farming. I was offered one of their cheeses, which seemed excellent, but could not find room for it in my kit. It is claimed that this school which makes a point of keeping in touch with its old pupils, has turned out thousands of successful colonists and that failures have been very few.

The laws controlling adoptions also seem to be very complete and stringent. Under these very complete systems, it can be readily seen that there is very little scope for private charity. The charity of the Dominion is an organized public responsibility. Still there is room for that most useful body, named the Plunket Society, or the Royal New Zealand Society for the health of women and children, originated by Dr. Truby King. I should advise you, if you have not already done so, to read Dr. Margaret Harper's report on this Society, to the kindred society of New South Wales; it is very concise, clear and informa-

tive and Dr. Harper's recommendations are excellent. The literature published by the Plunket Society is also well worth reading. The Society over there seems to have filled a long felt want in more ways than one; it has given scope for the development of the hitherto almost latent charitable aspirations of the ladies of New Zealand. In its early infancy it was almost a pariah; looked up with suspicion by the Government and the medical profession. Now it is "going strong," helped by the Government, encouraged by the profession and it is recognized by all that it is doing splendid work. A first impression of the teaching of the Society might be that humanized milk was first and foremost, but on inquiring more deeply, one finds that breast-feeding is inculcated as being all important. In the very early days of the Society's existence there seems to have been a tendency to rely too much on the then considered wonderful new methods and perhaps in consequence a few infants crossed the bar without adequate medical pilotage. I had the privilege of being a guest at the annual meeting of the Wellington Branch, which is by far the weakest of the city branches. The meeting was largely attended, the enthusiasm was great and the report most interesting and satisfactory. Mrs. Hosking, the Honorary Secretary, to whom I am greatly indebted, took me to the rooms of the Society, where I saw the nurses at work and I visited some of the homes of the patients with one of the nurses. I noted the great enthusiasm of the latter and that many of the patient were quite well-to-do.

Education.

Education, both State and private, has reached a high state of efficiency in the Dominion. There are many splendid private schools, both for boys and girls. At the present time I believe there are over 20,000 pupils in these and they already have their traditions. State education has long held a foremost place in the Government of New Zealand. It is free and compulsory and an enormous amount of money is being spent annually. There are primary, secondary and high schools, the teaching at the latter being very advanced. There are at the present time about 220,000 pupils at the State schools, some of them being boarders; the Government has under contemplation a proposal to build 30 State boarding schools. Every school is managed by a committee elected by the parents of the pupils. The position on these committees is entirely honorary and all matters of administration are done by them or through them. There is also what is evidently a governing body in each province, *viz.*, a provincial board elected by the school committees. The result of these regulations is that all members of the community throughout the land take an intimately deep interest in all matters connected with State education. Technical and agricultural education have received much attention from the successive governments and recently are undergoing much greater development and expansion. There are also special schools all over the Dominion for Maoris. At the top of the educational structure is the University, which is a controlling and examining body, the teaching being given at the four colleges at Auckland, Wellington, Christchurch and Dunedin. The latter

is the only one where medicine is taught. The University as a whole is governed by a Senate and the colleges by local boards; a noticeable point about the latter is that the Mayor of the city is *ex officio* a member of the board (I think this piece of information is correct). Examination papers are mostly sent for correction to Great Britain. I believe there is an exception in the case of medical examinations. I was told that the endowments of all the colleges are in a very sound financial position.

It will be gathered from these notes that New Zealand has adopted measures which, though giving the Government control of all matters relating to health, charity and education, yet create an interest in them and throw an onus and responsibility on all classes of the community to see that they are carried out successfully. To this cause, therefore, I should attribute the great success of all these undertakings.

Endemic Goitre.

A short note on the endemic incidence of goitre in the south island. This is a subject apparently avoided by New Zealanders generally and I omitted to broach the subject to any of the medical men I met, so that probably many of you know more about it than I do; I am sure that most of you know more about endemic goitre than myself. It is well known that on the world's surface there are many "goitrogenous" districts and there is much evidence to show that drinking certain waters is a cause of the condition. I believe that it is still doubtful what quality or constituent in these waters is the toxic agent of endemic goitre, but that it is now generally accepted that the cause is a living organism. This is interesting as regards Christchurch, which has a wonderful shallow artesian water supply. This water is said to be subterranean snow-water; it is very clear and cold. Goitre is very prevalent in and about Christchurch; a visitor there cannot help noticing the number of women and girls with enlarged thyroids. I was told by a lay individual that all the Christchurch women have goitre. There are no doubt a great many cases which are very slight and for the most part those in which hypertrophy is very considerable do not cause serious symptoms, as the subjects of them seem to be otherwise in good health. I do not know to what extent exophthalmic goitre exists. I only noticed one case, in a lady of my acquaintance, in whom thyroidectomy had been done with marked success as regards results. I did not learn whether it is the custom in that district to boil the drinking water. I believe that many thyroidectomy operations have been and are being performed.

New Zealand as a Holiday Resort.

In conclusion, I cannot refrain from giving you a few notes about the country as a holiday place and health resort. One might get the impression that there is a great lack of sunlight, but statistics show that there must be many sunny days. The real summer weather does not appear till January, the extreme lateness of the stone-fruit season being evidence of this; there were apricots in the Dunedin shops in March. One can obtain the most varied gradations of climate with very little trouble. For instance, it

is an easy day's motor car drive over a perfect road from the charming seaside town of Timaru to the wonderful scenery, bracing climate and perpetual snows and glaciers of Mount Cook. The climate generally of the north island is mild and temperate, that of the south mostly bracing, especially far south. Among the cold lakes and southern alps, the picked spot I should say, is the Hermitage, Mount Cook, a well-conducted, palatial place, under complete Government control. To the tourist New Zealand has many attractions, right through from the wonders and beauties of north island to the pastoral loveliness and lake and mountain grandeur of the south. Travelling is always interesting, as so much of the touring is done by motor car, and easy, as touring is one of the best-organized businesses of the country. To the geologist and naturalist there are features of great interest, to the former by reason of the wonderful lake, mountain and terrace formations, to the latter, not so much from the wealth of animal life, as from the almost prehistoric character of the birds and lizards. There are no snakes. There is sport for the sportsman, fly-fishing for trout, deep-sea fishing in sheltered waters, deer-stalking and feathered game is plentiful.

Though New Zealand is so advanced, it seemed to me that in many ways it is capable of much greater development. There is still much land, now almost unused, that would become much more productive if irrigated, and they are only now discovering ways of cultivating the enormous areas of waste pumice country. Comparatively little has been done to harness the magnificent rivers, rapids, water falls and lakes for irrigation and electric power and light. Great credit is due to the Government for its re-afforestation work; miles of waste mountain country are being planted with different kinds of eucalyptus and pines. I can picture New Zealand in the future a land of intense cultivation, with an immense population, more prosperous even than it is now. At the present time it fulfills Kipling's description: "Last, loneliest, loveliest." The last to be peopled by a white race; so separated from the rest of the world, its people so isolated, its scenery so wonderfully diverse and beautiful.

I found it a most desirable place in which to spend a holiday; its climate delightful, its people most kind and hospitable. I advise you all to go there and, if you have already been, to go again.

THE CASE OF ANNE BOLEYN.

By C. MacLaurin, M.B., C.M., F.R.C.S.E.,
Sydney.

There is something Greek, something akin to *Œdipus* and *Thyestes*, in the tragedy of Anne Boleyn. It is difficult to believe as we read it that we are viewing the actions of real people, subject to passions violent indeed, yet common to those of mankind; and not the creatures of a nightmare. Yet I believe that the actions of all three protagonists, Henry, Catherine and Anne, can be readily explained if we appreciate the facts and interpret them with the aid of a little medical knowledge and insight. Let us search for this explanation. Needless to say we shall not get it

in the strongly Bowdlerized sketches which most of us have learned at school; and it is a pity that such rubbish should have to be taught, because the period is the most important period of English history; the actors played vital parts and upon the drama that they enacted has depended the history of Europe ever since.

In considering a historical drama one has to remember the curtain of gauze which time has drawn before us and to allow for its colour and density. In the case of Henry VIII. and his time, though the actual materials are enormous, yet everything has to be viewed through an *odium theologicum* which is unparalleled since the days of Theodora. In the eyes of the Catholics Henry was, if not the actual devil incarnate, at all events the next thing; and their opinion has survived among many people till the present day. We must make a good deal of allowance.

Henry succeeded to the throne, nineteen years of age, rather free-living, very handsome, full of *joie de vivre*, charming and with every promise of greatness and happiness. He died at fifty-five, unhappy, worn down with illness, at enmity with his people, the Church and the world in general, leaving a memory in the popular mind of a murderous concupiscence, which has passed into a by-word.

About the time that he was a young man syphilis, which had been introduced by Columbus's men, ran like a whirlwind through Europe (1). Hardly anyone seems to have escaped and the foundations were laid for that syphilization which has transformed the disease into its present comparative mildness. It is impossible to doubt that Henry contracted it in youth; evidence will appear as we proceed. The first act of his reign was to marry for political reasons Catherine of Aragon, daughter of Ferdinand and Isabella, a woman who, though far from beautiful, proved herself to possess a great and noble soul and a courage of well-tempered steel. The English people took her to their hearts and when unmerited misfortunes fell up her, never lost the love for her which they had felt when she was a happy young woman. She was six years older than Henry and for many years the two lived happily together. Seven months after marriage Catherine was delivered of a daughter, still-born. Eight months later she had a son, who lived three days. Two years later she had a still-born son. Nine months later she had a son, who died in early infancy and eighteen months afterwards the infant was born who was to be afterwards Queen Mary. Henry was intensely disappointed and for the first time turned against his wife. It was all-important to produce an heir to the throne, for it was thought that no woman could rule England. No woman had ever ruled England, save only Matilda, and her precedent was not alluring. So Henry longed desperately for a son; but as the little Mary grew up, a sickly child, he became passionately devoted to her. She grew up, as one can see from her well-known portrait, probably an hereditary syphilitic. For a time Henry had thought of divorcing Catherine, but this affection for Mary probably turned the scales on the side of her mother. Catherine had several more miscarriages and by the

age of forty-two ceased to menstruate; and it became clear that she would have no more children and that she could never produce an heir to the throne.

During these years Henry's morals had been no worse than those of any other prince in Europe; certainly immeasurably better than those of Louis XIV. and XV. or Charles II.. He met Mary Boleyn, daughter of a rich London merchant and made her his mistress. Later on he met Anne Boleyn, her sister, a girl of sixteen, and fell in love. We have a very good description of her and several portraits. She was of middling stature, not handsome, with a long neck, wide mouth, bosom "not much raised," eyes black and beautiful and a knowledge of how to use them. Her hair was long and it appears that she used to wear it loose and flowing in the house; it was not so very long since Joan of Arc had been burnt partly because she went about without a wimple. Anne seems to have been a bold and ambitious girl, who laid herself out to capture Henry and she succeeded. Mary Boleyn was thrust aside and Henry paid violent court in his own enormous and impassioned way to Anne. We have his love letters; there can be no doubt of his sincerity, or that his love for Anne Boleyn was the great passion of his life. Had she behaved herself, she might very well have retained that love. She repulsed him for several years and we can see the idea of divorce gradually growing in his mind. He appealed to the Pope to help him. Catherine defended herself bravely and stirred Europe in her cause. The Pope, Clement VII., hesitated, crushed between the hammer and the anvil, between Henry and the Emperor. Henry discovered that his marriage with Catherine had come within the prohibited degrees and that she had never really been his lawful wife at all; it was a matter for discussion whether the Pope's dispensation could acquit them of mortal sin. He definitely promised Anne that he would divorce Catherine and that she should be Queen of England; and Anne at last yielded to his entreaties. Meantime the struggle for the divorce, out of which grew the English reformation, proceeded, the Pope (2) swaying this way and that, and Catherine defending her honour and her throne with most splendid courage; and Anne became pregnant. The doctors, nurses and astrologers assured Henry that the fœtus was a son; the lovers were mad with joy at the prospect and were married in secret, divorce or no divorce. It must be remembered that according to the canon law the marriage with Catherine had been illegal and that even now it is exceedingly doubtful whether the Pope could make it legal; yet Henry had never troubled to raise the question till after he had fallen in love with Anne.

The time came for Anne to fulfil her promise and provide an heir. King and Queen anticipated the event with wild excitement. There had been several lovers' quarrels, which had been "made up" in the usual manner; once Henry was heard to say passionately that he would rather beg his bread in the streets than desert her. Yet it is doubtful whether Anne was ever anything more than an ambitious courtesan; it is doubtful whether she ever felt anything more towards him than her natural wish to be Queen. In

due course the baby was born and it was a girl, the girl who afterwards became Queen Elizabeth (3).

Henry's disappointment was tragic and Anne for the first time began to realize the terror of her position. She was detested by the people and the court, who were emphatically on the side of the noble lady whom she had supplanted. She had estranged everyone by her vainglory and arrogance in the hour of her triumph; and it began to be whispered that even if her own marriage were legal while Catherine was alive, yet it was illegal by the canon law, for she was Mary Boleyn's sister and Mary Boleyn had been Henry's wife in all but name. Canonically speaking Henry, by marrying her, had done no better than by marrying Catherine. A horrible story went around that he had been familiar with her mother first and that Anne was in reality his own daughter and, moreover, that he knew it. I think we may definitely and at once put this aside as a theological lie; there is absolutely no evidence for it and it is impossible to conceive two persons more unlike than the little, lively brunette and the great fresh-faced "bluff King Hal." Moreover, Henry denied the story absolutely and whatever else he was, Henry was a man who never hesitated to tell the truth. Most of the difficulties in understanding the complex history of the period disappear immediately if we take Henry's own simple statements; but these suffer from the incredulity which Bismarck found three hundred years later when he told his rivals the unvarnished truth.

Let us anticipate events a little and narrate the death of Catherine, which occurred in 1536, nearly three years after the birth of Elizabeth. The very brief and sketchy accounts which have survived, give me the impression that probably she died of uræmia, but no definite opinion can be given. Henry, of course, lay under the immediate charge of poisoning her, but I do not know that anyone believed it very seriously. So died this unhappy and well-beloved lady, to whom life meant little but a series of bitter misfortunes.

After Elizabeth was born, the tragedy began to move with terrible impetus to its climax. Henry developed an intractable ulcer on the thigh, which persisted till his death and caused him severe agony. He became corpulent, the result of over-eating and over-drinking. He had been immensely worried for years over the affair of Catherine; as a result his blood pressure seems to have risen, so that he was afflicted by frightful headaches, which often incapacitated him from work for days together. He gave up the athleticism which had distinguished him in his resplendent youth, aged rapidly and became a harassed, violent, ill-tempered, middle-aged man; not at all the sort of man to turn into a cuckold.

Yet this is precisely what Anne did. Less than a month after the birth of Elizabeth she solicited Sir Henry Norris, the most intimate friend of the King, to be her lover. A week later he yielded, on October 12, 1533. During the next couple of years Anne seems to have gone absolutely out of her senses. She seems to have solicited several prominent men about the court and even to have stooped to one of the musicians; worst of all, it was said that she had com-

mitted incest with her brother, Lord Rochford. Nor did she behave with the ordinary consideration for the feelings of others, which might have brought her hosts of friends should the time ever come when she should need them. Arrogant and overbearing, she estranged everyone at court; she acted like a beggar on horseback; and was left without a friend in the place. And she, who owed her husband such a world, behaved to him with the same arrogance as she showed to others and, in addition, jealousy, both concerning other women whom she feared and concerning the King's own beloved daughter, Mary. She spoke to the Duke of Norfolk, her uncle (4), one of the greatest peers in the realm, like a dog; and he muttered that she was "*une grande putaine*." The most polite interpretation of the French word is "strumpet." When her own uncle used such an appellation to his niece, what sort of a reputation could have been gathering around her?

She had two more miscarriages. After the second the King's fury flamed out and he told her how deeply he regretted that he had ever married her. Meanwhile all sorts of scandalous rumours were flying about; and finally a maid-of-honour whose chastity had been impugned, told a Privy Councillor that no doubt she was no better than she should be, but at any rate the Queen was far worse. The Privy Councillor related this to Cromwell; the rumours, being thus focussed, he dared to tell the King. Henry changed colour and ordered a secret inquiry to be held. At this inquiry the ladies of the bed-chamber were strictly cross-examined, but nothing was allowed to happen for a few days, when a secret commission was appointed, consisting of the Chancellor, the Judges, Thomas Cromwell and other members of the Council. Sir William Brereton was first sent to the Tower; then the musician, Smeton. Next day there was a tournament at Greenwich, in the midst of which Henry suddenly rose and left the fête, taking Norris with him. Anne was brought before the Commission next day and committed to the Tower, where she found that Sir Francis Weston had preceded her. Lord Rochford, her brother, joined her almost immediately on the charge of incest.

The Grand Juries of Kent and Middlesex returned true bills on the cases and the Commission drew up an indictment, giving names, places and dates for every alleged act. The four commoners were put on trial in Westminster Hall, Anne's father, Lord Wiltshire, being excused attendance, though he volunteered to sit, as a verdict of guilty against the men would necessarily involve the woman. Smeaton, the musician, confessed; the other three protested their innocence; but all were found guilty and sentenced to death. Thomas Cromwell in a letter said that the evidence could not be published, because it was so abominable. Anne was next brought to trial before 25 peers of the realm, her uncle, the Duke of Norfolk, being in the chair; she was sentenced to be hanged or burnt at the King's pleasure and her brother was tried separately and also convicted. Her father and uncle agreed with the verdict. The five men were executed on Tower Hill in the sight of the woman and her death was postponed from day to day for one reason and another. In the meantime Henry pro-

cured a divorce on the pretext that his marriage with her had been within the prohibited degrees, while Anne, in a state of violent hysteria, continuously maintained her innocence, though she made some extremely unwise admissions if she had really been innocent. On the night before her execution she said that the people would call her "*Queen Anne sans tête*," (5) laughing wildly; if one pronounces these words in the French manner they form a sort of jingle, as who should say "ta-ta-ta-ta"; and this foolish jingle seemed to run in her head, as she kept repeating it, laughing hysterically; and she placed her fingers around her slender neck—almost her only beauty—and said that the executioner would have little trouble, as if this were a great joke. These things were put to the account of her light and frivolous nature; so little did her companions understand the human heart. Anne was beheaded in the Tower by a swordsmen brought over specially from St. Omer. As she had predicted, he had little trouble; but took her unawares and struck off her head with one blow without her ever having seen the broadsword. Her body and severed head were bundled into a cask and buried in the precincts of the tower (6). On the same day Henry obtained a special dispensation to marry Jane Seymour. He married her next day.

The chief authority for the life of Henry VIII. is contained in the "Letters and Papers of the Reign of Henry VIII.," edited by Brewer and Gairdner, published 1910. This gigantic work, consisting of 20,000 closely printed pages, is the greatest monument of English scholarship and no history of the times can now be considered complete until it has been thoroughly studied and connoted. Froude's history is written in his peculiarly charming and brilliant style, but is now rather out of date and is marred by his hero-worship of Henry and his strong Protestant bias. He sums up absolutely against Anne and, after reading the letters which he publishes, I do not see how anyone can do anything else. He believes her innocent of incest, however. Pollard's history is meticulously accurate and is charmingly written; he thinks that it is impossible that the juries could have found against her and the court have convicted her without the strongest evidence, which has not survived; with that we must rest content. P. C. Yorke sums up rather against her in the "Encyclopædia Britannica"; but S. R. Gardiner thinks the charges too horrible to be believed and that probably her only crime was that she could not bear a living son. The "Unknown Spaniard" of the *Chronicle* is an illiterate fellow enough, but no doubt of Anne's guilt enters his artless mind; he probably represents the popular contemporary view. He saw the execution. He gives us an account of the arrest of Sir Thomas Wyatt, the poet, and the *ipsissima verba* of a letter which Wyatt wrote to Henry, narrating how Anne had solicited him even before the marriage; just the sort of thing one would expect from an incontinent girl for whom nymphomania was lying in wait. That Henry should have pardoned him tends to show that the real crime of Anne was that she had contaminated the blood-royal; a capital offence in a queen in almost all ages and in almost every country.

Lord Herbert, of Cherbury, writing seventy years

later, narrates the ghastly story with little feeling one way or the other. He is a very different kind of man from the "Unknown Spaniard" and writes in the great cadences of the authorized version, which was then becoming almost general. The legend of Anne's innocence and Henry's blood-lust had not yet arisen. Martin Hume is the only man I have read who believes her entirely innocent; but the value of his book may be judged from the fact that he thinks Henry to have been a weak and cowardly man. How anyone could write such a thing after looking at any of Henry's portraits passes my comprehension.

The following considerations appeal strongly to myself. If Henry wished to get rid of her, as he did, then Mark Smeton's evidence alone was enough to hang any queen in history, from Helen downwards. Why should the King and Thomas Cromwell, both exceedingly able men, gratuitously raise the questions of incest and promiscuity and send four absolutely innocent men to their death without reason? Why should they raise all the tremendous family ill-will and public reprobation which such an act of blood-thirsty tyranny would have caused? Stern as they were throughout, they never showed any signs of mere blood-lust at any other time; and the facts that Anne's father and uncle agreed in the justice of her conviction and that, except for her own denial, there is not a word said in her favour seems to me to need a lot of explanation.

I believe we can explain Anne's conduct by hysteria and nymphomania. I cannot pursue this repulsive subject here; those who are interested, will find plenty of accounts of such unhappy women, cases parallel to Anne's, in Havelock Ellis and Kisch. There is plenty of undoubted evidence that she was hysterical and unbalanced; she passionately longed for a son; her terrible husband probably frightened the wits out of her; and it is simpler to believe her a victim of a well-known and common disease than that we should believe nearly the whole peerage of England and its leading statesmen suddenly to be affected with blood-lust. I would further say that her spasms of violent temper after her marriage, her fits of jealousy, her foolish arrogance and insolence to her friends are all mental signs which go along with nymphomania. The fact that the trouble began while she was still in the puerperal state appears highly significant. The proper place for Anne Boleyn was a mental hospital.

The rest of the history of Henry VIII. is simply that of a case of neglected arterio-sclerosis. His case, along with those of his children, Edward VI., Mary and Elizabeth, deserve a paper to themselves. The historical facts here given are taken, with what discrimination I could exercise, from responsible historians and are probably not far from the truth. The medical inferences are my own.

Inexorable Nemesis had avenged Catherine. The worry of the divorce had left her husband with an arterial tension which, acting on the royal temper, caused great misery to England and ultimately death to himself; while her mean little rival lay huddled in the most frightful dishonour that has ever befallen a woman. Decidedly there is something Greek in the complete horror of the tragedy.

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References.

- (1) D'Arcy Power and Keogh Murphy's "System of Syphilis."
- (2) One thinks of Browning's "Give one good moment to a poor old Pope," in *The Ring and the Book*; but he was referring to Innocent XII.
- (3) It is much to Nan Bullen's credit—or discredit—that to a syphilitic husband she bore a daughter of such extraordinary vigour.
- (4) On the mother's side. Her father was a commoner, later ennobled.
- (5) There is *εἰσπνεύει* here, to carry out our Greek simile. At the time that she was congratulating herself that she would at least die Queen of England, she was already once more Miss Anne Boleyn. Henry had divorced her. I doubt if she ever knew it.
- (6) They really seem to have taken some trouble to make the death of the King's old flame as little terrible as possible. They might have burnt her, or they might have added the usual concomitants of horror to her execution.

Reports of Cases.

RUPTURE OF THE CORONARY ARTERY.¹

By H. L. Kesteven, M.D., Ch.M. (Syd.),
and
C. A. Verco, M.B., Ch.M. (Syd.),
Sydney.

The patient, a man of 40 years of age, when seen first by one of us near midnight, complained of acute epigastric pain, which, though still severe, had been worse a little while previously. He stated that earlier in the day he had eaten smoked fish and believed that to be the cause of his pain.

His temperature was normal, his pulse somewhat accelerated and definitely of high pressure, though no actual record was taken.

The condition appeared to be a simple case of indigestion, but in satisfaction of the grave anxiety of one of the relatives a more careful examination than the case seemed to merit was carried out. A physical examination of the chest failed to reveal anything abnormal in the lungs or heart. The pupils reacted normally and the tendon reflexes were normal. Nothing abnormal was detected in the abdomen, beyond a slight tenderness to pressure in the epigastric region.

Morphine was administered by the mouth and an enema and hot turpentine stupes ordered. Seen the next morning a similar diagnosis was made and morphine was administered hypodermically. He vomited two or three times and then his pain gradually became much easier.

Next day he had very little pain, but complained of numbness and loss of power on the left side. It was now found that a condition of flaccid paralysis affected the leg and arm of that side, no tendon reflexes being obtainable. He gave an occasional sigh as though oppressed; an examination of the chest was again carried out without anything abnormal being detected.

¹ Read at a Meeting of the New South Wales Branch of the British Medical Association on July 30, 1920.

The following midnight, that is 48 hours after the first call, in response to an urgent message one of us proceeded to the house, but found the man dead.

We both declined to give a certificate of death. An autopsy was performed the next afternoon by Dr. Stratford Sheldon, who permits us to record his findings.

The body was that of a well-built man, spare but not thin, showing no external signs of illness or injury.

On opening the pericardium it was found to be full of blood. No gross rupture of the heart was discernible, but on section it was found that the outer layers of the heart muscle in the region of the coronary arteries were burrowed by blood, which apparently had reached this situation through rupture of one of the coronary arteries, although it was not determined which artery. The escaping blood had also invaded the tissue of the lung root, reaching that situation under cover of the pleura around the main vessels of the heart. The arteries showed diffuse patchy atheroma. The kidneys were remarkable for the large size of the whole of the arteries and a similar, though less marked, condition was observed in the liver. In the brain no lesion was detected, though sought in explanation of the flaccid paralysis that preceded death. The cerebral arteries were also the seat of patchy atheroma. No other lesions or abnormalities were detected in the cadaver.

Death had, of course, occurred rapidly on the escape of blood into the pericardium. The abdominal symptoms were probably due to pressure on the left pneumo-gastric nerve in the region of the main vessels and lung root, by the burrowing blood. The flaccid paralysis, fairly certainly, was due to an embolus, but, as stated above, the damage done to the brain did not amount to a grave lesion.

The case was remarkable for the absence of pathognomonic symptoms and for its duration of 48 hours.

A CASE OF CEREBRO-SPINAL MENINGITIS.

By Elliot True, M.B., Ch.M. (Syd.),
Resident Medical Officer, Children's Hospital, Carlton.

Wm. R., aged 12½ years, was admitted to the Children's Hospital at 10 p.m. on September 7, 1920, with the following history: Thirty hours before admission the boy returned home from school complaining of severe headache. Some hours later he vomited. He slept well the same evening and till 4 p.m. on the succeeding day, when he awakened with very severe headache and pains in neck, spine and legs. Headaches and pains persisted and the boy was admitted to hospital screaming with pain and in a condition of semidelirium.

Previous History.

Six years previously the boy had a fracture of the frontal bone. For this the skull was trephined. He had suffered from periodic frontal headaches since.

Condition on Admission.

Temperature, 38.9° C.; pulse-rate, 72; respirations, 30. The boy was screaming with pain, but answered questions intelligently during the intervals. The pupils were equal and reacted to light and accommodation. No abnormal signs in the ears, throat, chest and abdomen were detected. The reflexes, superficial and deep, were equal and rather active; Kernig's sign was more marked on the right side than on the left. Slight pain was elicited on flexion of the head on the neck. There was no cervical rigidity and no head retraction.

At 11 p.m. the patient was given morphine (0.01 grm.), with atropine and strychnine. At 1 a.m. the patient was noticed to be cyanosed and the respirations ceased. The pupils were widely dilated and the corneal reflexes were absent. The boy had every appearance of being dead, but on auscultation the heart sounds were heard. Artificial respiration was commenced and the colour soon returned. The heart's action improved. Normal respiration, however, did not recommence. It was noticed that the right pupil was larger than the left.

When artificial respiration was stopped, the boy rapidly became cyanosed. The pupils dilated widely and both eyes deviated to the left. The heart's action became slower and

poorer and a few irregular, convulsion contractions of the muscles of the neck and jaw occurred. Artificial respiration again quickly restored the colour and the heart's action.

Artificial respiration was continued for 8½ hours, during which time atropine and strychnine were given and lumbar puncture yielded a few cubic centimetres of macroscopically clear fluid, not under increased pressure. It was then decided to explore the head. During artificial respiration the site of the old fracture was explored, but no pathological condition was discovered. A cerebellar decompression likewise failed to reveal anything abnormal. The patient died shortly after returning to the ward from the operation theatre.

Post-Mortem Examination.

At the autopsy a purulent meningitis was discovered. Pus was present in the sulci, chiefly in the convexity of the brain. At the base of the brain there was just a little plastic lymph. There was no pus at the cerebello-pontine angle. There was no tumour, abscess, nor dilatation of ventricles.

The pathologist demonstrated the presence of the meningococcus microscopically.

The points of interest in the case were the sudden failure of the respiratory centre and the 8½ hours of artificial respiration without appreciable impairment of the heart's action.

I am indebted to Mr. W. Kent Hughes for his kind permission to publish this case.

Reviews.

WILLIAM SUTHERLAND.

The late William Sutherland richly deserved the memorial volume which has just been published by a committee of his friends in Melbourne.¹ He had the rare type of mind which is careless of money, which wishes for nothing but to dream and work at its dreams; to which lucre is a means of keeping the body alive while the soul explores the recesses of the infinite. Utterly careless of fame or success as the world understands these terms, he lived for his work in the most recondite and abstract of sciences, content if the President of the Immortals would let him live in poverty while he investigated the mysteries of molecular physics. He never seriously applied for a position on the university, though he might have had a professorship or a well-paid lectureship had he wished; but he could never bring himself to sacrifice his liberty sufficiently to buckle down to the drudgery of teaching; and he passed his comparatively short life in irregular journalistic work, done in the intervals of his scientific dreaming. Passionately fond of music, like so many votaries of pure science, he never troubled to become really adept at the piano and shrank from the still greater labour of the violin; but occasionally published papers on physics, some of the greatest possible value which won for him a world-wide reputation. Probably few of those who read these words, have ever even heard of him; few indeed there will be who realize what a genius lived in Melbourne ten years ago. A prophet is never without honour, save in his own country.

Sutherland's life-work is contained in 69 papers of scientific interest, published in various philosophical and physiological magazines. It is impossible here to give more than the barest outline of these and it is difficult to render even this intelligible or interesting to ordinary readers. Sutherland was the first physicist to obtain the correct relation between the viscosity of a gas and its temperature; he did this by inventing a mathematical equation which has been universally accepted as solving the behaviour of molecules at various temperatures and pressures: the "Sutherland constant." The famous "Michelson Morley experiment" for a time possessed him like a devil and he threw aside all other work in order to find some flaw. This experiment seemed to prove that the earth moving through the ether, carried ether along with it; or (*horresco referens*) might it not even prove that there was no ether at all and that

¹William Sutherland: A Biography, by W. A. Osborne; 1920. Melbourne: Lothian Book Publishing Company, Proprietary, Limited; Crown 8vo., pp. 102, illustrated. Price, 7s. 6d. net.

the work of generations of physicists was to go for nothing? At any rate, it made the riddle of the universe more unanswerable than ever and has led speculators into those realms of transcendentalism and metaphysics that we see in the theories of Einstein. Sutherland was enormously interested in the new ideas concerning relativity which sprang from the Michelson Morley experiment, but would never say more than that he could not help admitting that they might lead to vast results. Just now we are getting a fore-taste of what is to come, while we are all puzzling our brains to understand what Einstein means with his fourth dimension and possibly five, six, infinite numbers of dimensions to follow, a constant measured speed of light quite independent of the speed of the observer and all the rest. Sutherland kept himself from being drawn into the relativity vortex which has attracted so many brilliant speculators; in a year or two he returned to his molecular physics, though he never ceased to ponder over the Michelson Morley experiment, fascinated, yet probably rather horrified, by the abyss which it laid open beneath his feet. In 1902 he published his great and famous generalization of the electric doublet, that is to say, that every atom contains one or more groups of opposite electrical units, positive and negative; he preferred to call them by the musical terms sharp and flat. By this he laid firmly the foundations for his theory of the electric constitution of matter. He worked steadily at the application of this hypothesis during the rest of his life, applying it to solids, gases, rigidity, magnetism, ionization, solution and nerve action. He did a good deal of work on proteins and took up the subject of spiral nebulae and the constitution of water. But throughout the last few years of his life he was constantly perplexed and worried by the disturbing dreams that were set agoing by Michelson and Morley. The foundations of belief seemed to be quaking beneath his feet. It is to be regretted in one sense that he did not work at these dreams further, valuable as his other work proved to be. Perhaps his powerful scientific imagination might have led him to anticipate Einstein. As it was he seems to have preferred to found his speculations on what he regarded as proved facts. His father and two of his brothers died of arterio-sclerosis and his turn was to come. One morning in 1911 he did not arise; when his sister entered his room, she found him lying dead. His heart had ruptured in his sleep, though he had appeared to be in his usual health. He was 52 years of age.

His learning was enormous; he read everything that came his way and he remembered what he read. He was simple, austere, generous and very kind. He loved children, but he never married. He would often take a billy and disappear into the bush to live alone with Nature and his dreams. Though born in Scotland—he arrived here at the age of five—he passionately loved Australia and counted himself blessed if he could spend a few days in the solitude of the great forests of the Dandenong Ranges, with no companions but the sunshine and the birds and the trees. It is impossible yet fully to estimate the value of his work. Death overtook him before he could gather his researches into the form of a book and it is difficult to make any generalized philosophy from the great mass of detailed papers which he left behind. But the charm of his personality and of his dreams and ideals must always remain to stimulate his fellow-countrymen and to encourage them to believe that there is something higher than the mere chase of gold. Sutherland was one of those like J. H. Fabre and Charles Darwin, who thrust aside the things of this world and deem these things well lost if they can but enrich the sum of human knowledge. Professor Osborne calls him a "saint of science" and the name is well deserved.

THE RATTEN CASE.

On October 15, 1920, the Medical Council of Tasmania determined to appeal to the High Court of Australia against the decision of the Chief Justice. It will be remembered that in our issue of August 21, 1920, it was announced that an application was made by the Medical Council to the Supreme Court for the issue of a commission to take evidence in Chicago. The Chief Justice of Tasmania refused the application.

On October 19 the Premier was asked in the House whether he had any statement to make in regard to "the action of the Medical Council in its persistent persecution of Dr. Ratten." The Premier stated that the Government was not prepared to undertake any responsibility for the financing of an appeal. He announced further that a course of action would be adopted by the Government to deal with the matter. On October 21 the Premier introduced a short bill to amend the *Medical Act Amendment Act of 1919*. Section V., paragraph 15 (d) reads as follows:—

The name of any person—

- (1) whose registration (whether under or by virtue of this Act or any act hereby repealed) has been obtained by fraud or fraudulent misrepresentation; or
- (2) who either before or after his registration, has been convicted of any felony or misdemeanour, or of any offence which, if committed in the State, would be a felony or misdemeanour; or
- (3) who has been guilty of any infamous conduct in any professional respect—

may be removed from the Register by order of the Supreme Court or a Judge thereof, on application by summons taken out in that behalf by the Council. Such summons shall state the grounds of the application and give reasonable particulars of the charge made. Such person shall upon the removal of his name cease to be registered: provided that the name so removed may be restored by order of the Supreme Court or a Judge thereof, and thereupon such person shall again be a registered person.

The proposed amendment consists of the insertion of the following words:—

Provided that no such application shall be made under paragraphs 1 and 3 of this Section, unless such offence was committed within seven years of the time of such application and except in the case of paragraph 2 of this Section, the offence for which such person was convicted, was committed within a like period.

It is reported that the Premier, in introducing the amending bill, stated that there was no other way of reaching finality but by validating Ratten's registration.

Dr. S. S. Argyle has been elected a member of the Victorian Legislative Assembly for Toorak. There were three Nationalist candidates: Dr. Argyle, Sir James Barrett and Mr. A. Darroch, and one Labour candidate: Mr. J. V. Stout. We regret that two medical practitioners belonging to the same political party should have contested the same seat. Had they selected different electorates, the medical profession in Victoria might have had two representatives instead of one. On the count of the first preference votes Dr. Argyle secured 5,528, Mr. Stout came second with 2,968, while Sir James Barrett was third with 2,519. The 2,381 votes cast for Mr. Darroch were distributed to the second preferences. This had the result of placing Sir James Barrett second on the list. Dr. Argyle's total was still under the figure representing an absolute majority. It was therefore necessary to distribute Mr. Stout's votes to the second preferences. The result was that Dr. Argyle secured 1,899 of Mr. Stout's votes and Sir James Barrett obtained 1,525. Dr. Argyle was thus returned with 8,182 votes, while Sir James Barrett's total was 5,214.

The Minister for Public Health and Motherhood of New South Wales, in reply to a question by Dr. Richard Arthur in the House of Assembly on September 16, 1920, stated that it was the intention of the Government to convert the Nurses' Home of the Sydney Hospital into a clinic for the treatment of venereal diseases and to find a fresh home for the nurses in Richmond Terrace. Other clinics would be established in various suburbs and country towns. Until these preliminaries were completed, it would be useless to bring the *Venereal Diseases Act* into operation.

Dr. W. M. Strong has been appointed to the position of Government Anthropologist at Papua. Dr. Strong is serving as medical officer at Port Moresby.

The Medical Journal of Australia.

SATURDAY, OCTOBER 30, 1920.

The Overseas Branches of the British Medical Association.

The British Medical Association had on April 4, 1920, 22,022 members. Close on 3,000 reside in Australia. On the last day of last year 13.5% of the members were attached to the Australian Branches. These figures reveal the size and importance of this Empire organization. They also disclose the fact that Australia provides considerably more than her share of the total. Many other associations and societies of medical practitioners have been formed within the Empire, but none has survived the test of time nor has any other exerted so large an influence on the medical profession. This singular position is significant. The laity recognize it and often endeavour to belittle it. The reasons why the British medical practitioner turns to the British Medical Association as the one organization worthy of consideration, are not far to seek. The antiquity of the Association has little, if anything, to do with its power. The fact that in twelve years it will have scored its century is merely evidence of the soundness of the principle on which it has been founded. The objects of the Association are ideal. Paraphrased and summarized they are the furtherance of medical knowledge and the maintenance of the honour and interests of the medical profession. Incidentally the Association has from its inception concerned itself with the public weal and with the prevention of disease. The history of the British Medical Association might be written in chapters corresponding to the periods terminating with a modification of the machinery for giving effect to these objects. Attempts have been made to add to the objects those of a trade union organization. Hitherto these endeavours have been successfully resisted. The Association may do those things that are conducive or incidental to the maintenance of the honour and interests of the medical profession. It cannot utilize one penny piece nor one ounce of energy for the purpose of applying trade union prin-

ciples. Were it otherwise the British Medical Association would not occupy the position of honour and trust it is enjoying. Every proposal to depart from the high ideals enunciated in the objects as set out in the Memorandum of Association involves a risk of undermining the power of this great organization.

There is yet another reason why medical practitioners seek membership of the British Medical Association. It is an Empire organization. We need but look back to the period of the war to measure what Imperialism means to the medical practitioner. Practically everyone who could have gone, answered the call in the name of the King and Empire. The response was of a kind to leave no doubt that to the overwhelming majority of medical practitioners in the Commonwealth the word "British" is held sacred.

Notwithstanding the extraordinarily strong position of the British Medical Association and the reasons for its strength, there is or has been a minority of members who would fain break asunder the home ties and trust to chance or impudence to secure for them the same status as the greatest of all medical associations has gradually forged for itself. The policy of these men has been penny wise and pound foolish. They begrudge the small contributions of money remitted to London for the financial stability of the mother organization. They have no interest in the great journal which serves the medical profession throughout the Empire. Surely the fate of the little societies and associations that have been born in opposition to the British Medical Association and that have died after a brief marasmic existence, should warn these narrow-minded patriots of the extreme danger of "cutting the painter."

On July 29, 1920, the members of the Witwatersrand Branch of the British Medical Association resolved:—

(1) That the Witwatersrand Branch of the British Medical Association is of opinion that the British Medical Association in South Africa should change its name to that of the Medical Association of South Africa, provided that it can become federated with the British Medical Association in Great Britain.

(2) This Branch of the British Medical Association approves of the draft Memorandum of Association attached and recommends that it be put forward for discussion at the Durban Congress as a basis for the constitution of the proposed Medical Association of South Africa.

The first part of the resolution is meaningless. The medical practitioners in South Africa can either break up the several Branches of the British Medical Association and form a new society or they can form a new society in addition to the British Medical Association. The one thing they cannot do is to change the name of a series of integral parts of a large organization and adopt a special constitution. It is possible that a few members who attended the meeting and who voted in favour of this extraordinary motion, knew what they wanted. They have certainly not indicated in words what their aims are. In any case they have blundered badly. The Representative Body at its meeting in Cambridge recently adopted the proposal of the Council concerning the admission to membership of the Association of incorporated bodies. A conference is to be held next year for the purpose of determining the amendments of the Articles of Association necessary to give effect to this proposal. Instead of waiting until this conference has been held, the members of the Witwatersrand Branch have pressed impetuously forward with a complete Memorandum for their new organization. The Memorandum contains nine clauses in addition to those contained in the Memorandum of the British Medical Association. The mover of the motion frankly admitted that the main object of the break was to enable the South African practitioners to have an association with all the powers and machinery of a trade union. They wish the power to raise funds by contributions, etc., to promote and secure the interests of the Association. In other words they are anticipating difficulties and wish to have all the weapons of trade unions in their hands. It was pointed out in the discussion that, while the British Medical Association was definitely opposed to the adoption of these measures, the constitution did not prevent executive bodies of the Association on the instruction of its members from employing collective bargaining on their behalf. More than that, it was shown that the Council actually does employ this means in an endeavour to obtain reasonable conditions of service for medical practitioners engaged in national insurance work. Notwithstanding this explanation, the majority adhered to the objectionable clauses and were prepared

to use means to induce the other Branches in South Africa to accept the proposal. The Durban Congress was held on October 4 and the following days. Within a short time we shall learn the fate of the motions sent to it by the Witwatersrand Branch. For the sake of our Empire organization, we can but hope that the matter was postponed pending the holding of the conference next year.

MOBILIZATION TREATMENT OF INJURED JOINTS.

It has long been a reproach to surgery that the orthodox treatment of fractures and joint injuries supplies the bone setter with adhesions to break down. From time to time the proposal to discard splints and to employ active or passive movement in the treatment of fractures has been made by critical surgeons who have endeavoured to find out why the results in these cases are so frequently unsatisfactory. Notwithstanding the clear evidence that has been brought forward, the average practitioner is afraid to cast aside his splints or to allow a patient with a fractured long bone or an injured joint to use his limb. It has often, too, been stated that bone setters make their fortunes in rectifying the indifferent results of the fixation treatment of surgeons and not by instituting a correct treatment for any particular class of injury. Since the pathology of adhesions has been studied and the physiological action of muscular tonus has been better understood, various attempts have been made to place the surgical treatment of these injuries on a sound foundation. In the year 1917 C. Willems pointed out that when a joint is fixed on a splint, shortening of some of the muscles takes place with wasting of muscle fibres. The sheath investing the muscle fibres loses its elasticity. Later a certain amount of degeneration of cells takes place and the shortening of the muscle is increased. As a result of loss of length and elasticity of muscles, the lymph tends to accumulate in the lymphatic vessels and when infection or inflammation occurs, the pent up lymph coagulates. The fibres become glued together and adhesions in the muscles form. Similarly adhesions form in ligaments, tendons and in the synovial membranes of the joints. He therefore deduced from these data that loss of elasticity and adhesions in muscles and joints could be prevented if the shortening and the lymph stasis could be avoided. To gain this end, he induced his patients to move their joints immediately consciousness is regained after the operation. In infected joints, ample escape for pus must be provided, while in contused and otherwise injured joints, the damaged tissue is removed, foreign bodies are extracted and the synovial membrane is closed. Willems claims to have obtained only two stiff joints out of one hundred treated in this way; in only one case was resection required. In advocating this form of treatment Dr. C. A. McWilliams¹ pleads for an accurate adherence to the technique elaborated by

¹ *Medical Record*, September 4, 1920.

Willems and for a recognition that the mobilization treatment is applicable only in acute cases, when it is started as soon as the patient comes under treatment. The results recorded by others have often been marred by a too early evacuation of patients and by incomplete technique. He is satisfied that both in infected and in non-infected joints, active movement by the patient immediately after the completion of the necessary surgical intervention lessens pain, improves the ultimate result and shortens the length of incapacity. The patient is able to walk about with a knee joint discharging pus without pain, provided that the pus has ample room for escape. At first the patients are timid in attempting movement, but they soon learn that the movements are not accompanied by pain and that there is a great gain by the avoidance of drainage tubes and irrigation. The dressings are changed when soiled. In the absence of suppuration, aspiration must be carried out if there is a collection of serous fluid in the joint. Pain results when the joint is distended; it is absent when the fluid is removed. He is very insistent on the fact that Willems's treatment is useless in chronic joint affections. The time has elapsed and it is courting failure then to attempt it. Dr. McWilliams quotes Mennell in connexion with the treatment of these neglected joints. When adhesions have formed, they should be broken down. The correct way of accomplishing this is to snap one adhesion at a time with a sudden, strong movement. It is useless to continue the wrenching after the adhesion has been broken, as this merely puts the inelastic muscles on the stretch and tears the fibrous tissue. At a later stage when movement up to the limit of the resisting muscle has become free and painless, a fresh forced movement may be undertaken to break down other adhesions. It is claimed that if injured joints were treated during the early stage by Willems's method and if cautious manipulations were applied in accordance with the directions of Minnell and Robert Jones in the neglected cases, the bone setters would be robbed of the material wherewith they now exploit the public.

EXPERIMENTAL PNEUMONIA.

Recent researches on the production of experimental pneumonia have been reported by Drs. Francis G. Blake and Russell L. Cecil from the bacteriological laboratories of the Army Medical School, Washington.¹

The experiments described were carried out on monkeys, since it had previously been demonstrated that pneumonia could readily be produced in these animals by the intratracheal injection of small quantities of cultured pneumococci suspended in saline solution. The method of inoculation was by direct intratracheal injection under aseptic precautions of a culture of pneumococci through a small sterile needle inserted into the lumen of the trachea between the tracheal cartilages just below the larynx.

After inoculation observations were made of the clinical symptoms and physical signs, temperature

records, leucocyte counts and blood cultures. Of 37 normal monkeys injected as described, 32 developed lobar pneumonia resembling the disease as seen in man. The leucocytic reaction was found to show a characteristic curve in non-fatal cases, consisting of a preliminary high polymorphonuclear leucocytosis, which commenced within six hours after infection and reached its maximum in from 24 to 48 hours. This was followed by a fall to normal, a secondary rise occurring during the latter period of the illness followed by a secondary return to normal with the crisis. The first depression of the leucocyte curve was found to be approximately coincident with the highest point of the bacteremia, as determined by the number of pneumococci per 0.5 c.cm. of blood estimated by the examination of blood cultures.

This phenomenon was observed with remarkable constancy throughout the experiments. In severe cases which terminated fatally with overwhelming pneumococcus septicæmia, after the initial rise the leucocyte curve showed a consistent fall, ending in a definite leucopenia, together with increasing replacement of mature polymorphonuclear leucocytes by immature forms. On the other hand, it was found that a persistent septicæmia with rising leucocyte count during the later phases of the disease was usually associated with the development of a complication, such as empyema or pericarditis.

Further it has been demonstrated experimentally that the instillation of large amounts of virulent pneumococcus culture into the nose and throat of monkeys which were susceptible to pneumococcal infection, failed to produce pneumonia, even though the animals so infected continued to carry the pneumococcus in the mouth for at least a month. There appear to be unknown factors which determine whether or not a virulent pneumococcus in the upper respiratory tract will gain access to the bronchi. Histological studies of the earliest stages of experimental pneumonia have made it appear probable that infection in lobar pneumonia takes place by the respiratory passages, the organisms appearing to gain access to the blood stream rapidly by means of the lymphatics draining the lungs. The infection is thus regarded as bronchogenic rather than hæmatogenous.

Further experiments were performed by subcutaneous and intravenous inoculation with pneumococcus culture. In no instance did pneumonia develop, the animals either dying of septicæmia or recovering without localization of the infection in the lungs.

The authors conclude that the pneumococcus is unable to initiate an infection of the normal mucous membrane of the upper respiratory tract or to produce pneumonia following intravenous injection, but the infection must gain access to the lower respiratory tract by way of the trachea in order to cause pneumonia.

Lobar pneumonia is therefore regarded as bronchogenic in origin and invasion of the blood stream by the pneumococcus as secondary to infection of the lungs. The character of the leucocyte reaction during the course of lobar pneumonia appears to bear a definite relation to the course of the disease.

¹ *Journal of Experimental Medicine*, April, 1920.

Abstracts from Current Medical Literature.

SURGERY.

(130) Ulcer of Posterior Wall of Stomach.

William J. Mayo (*Annals of Surg.*, July, 1920), reviewing the experience of chronic ulcer of the posterior wall of the stomach, states that in the five years to July, 1919, 838 patients were operated on for gastric ulcer at his clinic, of whom 85 had their ulcer on the posterior wall; 75% of these were in the middle third. The main characteristics were chronicity, the extent of the lesion, the more or less continued distress, the occasional exacerbations from localized peritonitis and the anemia in some cases amounting to marked cachexia. The difficulty of determining whether the condition is ulcer or cancer without microscopic examination is insisted upon. All varieties of gastric ulcer are more serious than duodenal ulcer—a fact established by the actuarial investigations of insurance companies. Among the 85 patients operated on, there was a 4.7% mortality in hospital and 11.7% mortality after leaving hospital; 60.4% were cured, 32.9% untraced and 6.9% unimproved. Opening the stomach and applying a cautery to the base of an adherent ulcer is not considered a sound procedure. Resection by the Billroth or the Polyá-Balfour method is the operation of choice when the pyloric half is involved and resection in continuity (sleeve resection) if the ulcer is in the middle third, is an excellent procedure. In his own technique Mayo prefers to approach the posterior wall from above, after dividing the gastro-hepatic omentum. The involved portion of the stomach, with the pancreas, is hooked up and the ulcer shaved off from the pancreas. The ulcer is excised with the cautery and the gap sutured with through and through catgut sutures. The lip of the omentum is drawn up through the gastro-colic omentum and then a posterior gastro-enterostomy completes the operation.

(131) Femoral and Saphenous Anastomosis.

P. Delbet, in discussing two cases of femoral and saphenous anastomosis (*Bull. et Mém. de Soc. de Chir.*, April 28, 1920), insists that ordinary varicose veins from valvular insufficiency of the internal saphenous vein is an affection of youth. In one case, a soldier of 22, the result was too recent to draw any conclusions from. The second operation had been performed in 1913 on an old woman with marked varicose veins and much eczema. The early result was so satisfactory that the patient demanded operation for the other leg. Four years and a half later, however, the eczema relapsed and, although the writer considers that even this short interval of cure justified the opera-

tion, he maintains that much better results are to be obtained if the operation is undertaken before sclerosis of the skin and subcutaneous tissue has taken place. Operation for such a condition has not yet become the custom, but the writer points out that hernia not long ago was operated on only when such accidents as strangulation occurred. Operation by anastomosis undertaken before sclerosis is capable of rendering a patient fit for sport or physical work.

(132) Blood Vessel Surgery in War.

B. M. Bernhelm (*Surg., Gynec. and Obstet.*, June, 1920) states that as regards blood vessel surgery in the war there was no place for reconstruction by fine suture or anastomosis owing to the presence of sepsis and the danger of secondary hemorrhage. A vascular anastomosis whether made by bullet or by suture will hold only if there is no infection. Excision and ligature were the rule. Even if gangrene ensued, amputation was then the worst eventuality, as opposed to the risk to life from secondary hemorrhage in a depleted subject, if arterial suture had been practised. The small number of cases of gangrene which followed ligature of the axillary and femoral arteries was a revelation, probably because both the artery and the vein were tied. There was more gangrene following injuries to the brachial and popliteal arteries, for the closer we approach to terminal vessels the more gangrene is encountered. Although vascular injuries were common, it is remarkable that they were not more so. Probably the inherent elasticity of the vessels allowed them to be forced out of the path by the explosive force of the impact. The peroneal artery was one frequently injured. It invariably gave trouble and was often associated with gas gangrene.

(133) Lung Abscess.

Wyman Whittemore (*Surg., Gynec. and Obstet.*, August, 1920) considers aspiration of blood or infected matter to be the most common cause of lung abscess. Broncho-pneumonia is the next most common cause, whereas ordinary lobar pneumonia is seldom a factor in its causation. The three conditions to be considered in the differential diagnosis are lung abscess, a small encapsulated or inter-lobar empyema and bronchiectasis. Drainage for the first two offers a good prospect of cure, but for bronchiectasis it is quite useless. Consideration of the history is important and examination of the sputum is valuable, because elastic fibres spell lung abscess. Unfortunately, elastic fibres are often not found. When a cavity can be detected in the skiagram with a definite fluid level in it, there is no question but that it is abscess. He does not believe in the old-fashioned method of putting in a long needle before operation. The two-stage operation is recommended. He prefers packing to suture, owing to the danger of causing pneumothorax. The lung abscess should be localized at

the first operation by searching for adherent pleura. Most abscesses are near the periphery, hence an adherent pleura is nearly always to be found.

(134) Operation for Advanced Cancer of the Tongue.

In advanced cancer of the tongue V. P. Blair (*Surg., Gynec. and Obstet.*, February, 1920) advocates the block removal of the tongue, the structures of the floor of the mouth, all muscles above the hyoid bone, the submaxillary and submental lymphatic glands and as much of the faucial pillars as is necessary. The mandible is cauterized if the ulcer approaches it. For 24 hours before operation forced fluids are given and a bloodless low tracheotomy under local anesthesia performed a day or two before the main operation. A transverse incision is used, skirting the upper border of the hyoid bone, the facial and lingual vessels ligatured and excision made with a cautery, starting at the symphysis and removing the periosteum from the inner surface of the mandible. The base of the tongue is cut across close to the hyoid bone and the lower part of each parotid removed. Before closing the external wound, a catheter is passed through the nose into the pharynx and fastened by a strip of plaster. The operation is followed later by a dissection of the lymph bearing areas on both sides.

(135) Ileo-Caecal Tuberculosis.

A case of ileo-caecal tuberculosis is recorded by Herbert Carson (*Chn. Journ.*, January, 1920). The appendix had been removed 5 years before. The operation revealed large ulcers in the lower end of the ileum and nodules were felt in both the ileum and the caecum, but no general involvement of the peritoneum was present. It was Hartmann who in 1906 drew attention to ileo-caecum tuberculosis occurring in a man thought to be suffering from malignant disease. Two types are distinguished: (1) the ulcerative, caseous form, in which the purulent mass forms wide adhesions, with ultimate sinus formation; and (2) the hyperplastic type, where there is an overgrowth of connective tissue in the walls of the caecum with limited ulceration and no adhesions. This is the type in which operation is specially indicated. The symptoms resemble those of chronic appendicitis and the disease does not retrocede. The stools give no assistance in diagnosis.

(136) Fish Scale Gall-Bladder.

J. R. Corkery (*Annals of Surg.*, June, 1920) describes a condition of the gall-bladder which has been diagnosed as "multiple small cysts of the mucosa." The mucosa appears to be studded with cyst-like bodies, about 1 mm. in size and of nearly the same colour as ordinary mucosa. The picture resembles the scales of a fish. On section no cysts are found and puncture of the bodies does not produce a spurt of fluid. Part or whole of the mucosa may be involved and in some cases true papil-

lomata are present. Lipoid substances are seen leaving a trail from the lumen of the blood vessels to the lumen of the gall-bladder. The condition is due to chronic inflammation.

GYNÆCOLOGY AND OBSTETRICS.

(137) The Treatment of Obstinate Occipito-Posterior Positions.

J. B. De Lee (*Journ. Amer. Med. Assoc.*, July 17, 1920) states that occipito-posterior positions are still very frequently overlooked and consequently are the cause of thousands of fetal deaths and of many maternal deaths annually. In those cases where internal rotation is slow, the prolongation of labour is harmful to both mother and child. It can be ascertained if anterior rotation is likely to occur by the positions of the anterior and posterior fontanelles. If the posterior is lower, anterior rotation will occur. The treatment differs when the head is engaged from that when it is not engaged. If engagement be delayed after the cervix is dilated, the membranes are ruptured with the patient lying on her side to prevent prolapse of the cord. The obstetrician should then proceed to perform turning or manual rotation by the following method: Under deep anesthesia the whole of the hand is passed into the uterus. The hand passed in is the one whose palm is directed towards the face of the child. The posterior shoulder is sought and is pushed past the promontory. The head, lying in the palm of the hand, is carried round at the same time. The outside hand, on the abdomen, then pushes the head down into the pelvis. At times it may be advisable, especially in primiparae, to draw the head down into the pelvis with forceps, then to take off the forceps and to allow time for head moulding to occur before delivery takes place. If descent, rotation and extraction are forcibly effected by forceps the child is always injured, often killed and the mother mutilated. With an engaged head, if flexion and rotation do not follow the use of simple methods, the head should be rotated by combined internal and external manipulation. If the head does not remain in the occiput anterior position, a double-pronged vulsellum should be applied to the scalp and the head held in its new position till the forceps are applied. The author states that the vulsellum does not cause any permanent injury to the scalp. Since he has adopted this method he has not failed on a single occasion to reduce occipito-posterior to occipito-anterior positions.

(138) A Unique Diffuse Uterine Tumour.

De Witt B. Castler (*Surg., Gynec. and Obstet.*, August, 1920) records a unique diffuse uterine tumour. The patient had noticed increased menstrual flow for two years and constant hæmorrhage for two months. Vaginal examination revealed an enlarged uterus filling the pelvis and extending

5 cm. above the symphysis. The uterus was movable and irregular in outline. The whole uterus was removed at operation, together with the right appendage and left tube. On section, the uterus was seen to contain several liver-coloured polypi; the walls contained several small interstitial myomata and the rest of the walls had a most peculiar appearance, being everywhere converted into a coarse meshwork by tough bands of fibrous or muscular tissue. In the interstices of the meshwork and standing out from the cut surface were small comedo-like, whitish areas, which were not friable. Microscopically, this appearance was found to be due to overgrowth and infiltration of the walls of the uterus by the interglandular stroma of the endometrium; there were no glands present as in ordinary adeno-myoma. Owing to the peculiar condition, the patient was watched carefully for several years. Four years later a mass developed in the left ovarian region, which produced partial obstruction. This mass, which consisted of a semi-cystic enlargement of the left ovary, adherent to the bowel and pelvic wall, was removed. Microscopically this mass was seen to consist of an ovarian cyst made up almost entirely of uterine tissue. The main cyst contained altered blood and was lined with uterine epithelium. The walls contained normal and dilated uterine glands. The author considers that the interglandular stroma of the endometrium may be the active infiltrating agent in ordinary adeno-myoma, the glands following on the overgrowth of the connective tissues. It is peculiar that the uterine tissue in the ovary did not start to hypertrophy, till some years after the uterus had been removed.

(139) Suppression of Urine in Pregnancy and the Puerperium.

Robert Jardine and A. Mills Kennedy (*Lancet*, July 17, 1920) state that they have seen twelve cases of suppression of urine during pregnancy and the puerperium and six of them have been proved by *post mortem* examination to have been due to symmetrical necrosis of the renal cortex. In three of the cases the condition was uncomplicated by any pre-existing disease of the kidney, in two there was evidence of slight arterio-sclerotic changes in the vessels and in the remaining case there was slight sub-acute interstitial nephritis. Symmetrical cortical necrosis would appear to be peculiarly related to the pregnant state. The cortical necrosis involves the outer two-thirds of the cortex. This is due to the fact that the large vascular arches in the inner part of the cortex are unaffected, whereas the smaller cortical branches are thrombosed. In cases of cortical necrosis there is always marked toxæmia. They state that the eclamptic toxin seems to be a complex body containing hemolytic, endothelolytic and thrombotic elements. Focal necrosis occurs in various organs, particularly

the liver. It is possible that the toxin in the majority of cases is altered by the liver and in rare cases it passes unaltered to the kidneys and causes wide-spread cortical necrosis and thrombosis in these organs. Once suppression of urine has set in, no treatment seems to be of any use in preventing a fatal termination. Decapsulation was tried in three cases; all three patients died. The authors state that successful treatment will depend on earlier recognition of the toxæmic state and the application of such remedies as will eliminate or counteract the toxin before it has caused necrosis of the tissues or vascular thrombosis.

(140) Blood Transfusion in Severe Secondary Anæmias.

H. Williamson (*Proc. Royal Soc. of Med.*, June, 1920) illustrates the value of blood transfusion before operation in a case of severe anæmia, produced by uterine fibro-myomata. The patient, aged 45, had been bleeding for some weeks. The pulse-rate varied from 120 to 140. The blood contained 845,000 red cells and 65,000 white cells per cubic millimetre. It was considered inadvisable to operate while the patient's condition was in this dangerous state. Transfusion of 600 c.cm. of citrated blood had an almost magical effect and the condition improved. In three days the red cells had risen to 3,485,000 and the white had fallen to 29,000 per cubic millimetre. Sub-total hysterectomy, with removal of both tubes and ovaries, was performed two and half weeks later. Williamson considers that transfusion diminishes the risk of the operation, lessens the risk of thrombosis and shortens the convalescence. He suggests the use of transfusion before delivery in cases of severe *ante partum* hemorrhage.

(141) The Pelvic Articulations.

Frank W. Lynch (*Surg., Gynec. and Obstet.*, June, 1920) says that the behaviour of the pelvic joints in pregnancy and labour is best summed up in Duncan's essay in 1867. With the softening of the pelvic joints, which occurs normally during pregnancy, increased motion of the sacrum occurs. When standing the promontory is thrown back and during the first stage the erect posture allows the head to descend more readily into the pelvis. In the squatting posture the promontory is pushed forwards and the coccyx backwards. During the second stage the contracting abdominal muscles pull the pubis upwards and thus increase the outlet. The observations of Budin that the symphysis is mobile during pregnancy have been confirmed by many observers. It has been demonstrated that the increased amount of separation is never more than three millimetres and in only 16% is it more than one millimetre. In a series of X-ray studies of pelvic articulations, it seems as if the widening of the sacro-sciatic spaces was almost a constant phenomenon. Only one woman had a marked widening of the symphysis during pregnancy.

British Medical Association News.

SCIENTIFIC.

A meeting of the New South Wales Branch was held on July 30, 1920, at the B.M.A. Building, 30-34 Elizabeth Street, Sydney. Dr. C. Bickerton Blackburn, the President, in the chair.

Dr. E. G. Blaxland read a paper entitled "Impressions of New Zealand from a Medical Practitioner's Point of View" (see page 407).

Dr. F. Guy Griffiths said that it was pleasant to listen to a communication of general interest. He congratulated Dr. Blaxland on his paper. He himself had not visited New Zealand, but had been very interested in the account of the sulphur baths. He referred to one of the most famous sulphur springs in the world, situated in the Valley of the Yarmuk, a few miles from the Jordan. It was stated that the ancient Roman bath houses were from sixteen to eighteen hundred years old. There were five pools of varying degrees of warmth. The district in which these springs were situated was very heavily infected with malaria. It was stated that there was a 30% death-rate from this disease. Every member of the Canadian contingent stationed in the district, had become infected. Dr. Griffiths pointed out that these sulphur waters had attracted the attention of many of the medical officers of the Australian troops in Palestine on account of the destructive effect of sulphur on the louse.

In reference to the Maori carvings and decorations, Dr. Griffiths pointed out that ideas of modesty varied very considerably. He thought that the British were hypocritical and ridiculous in this respect.

Dr. Blaxland had given them a vivid account of the excellent control exercised by the Government of New Zealand in various directions. He suggested that this Governmental efficiency might in part be due to the free admixture of Scottish blood.

Dr. W. F. Litchfield suggested that the New Zealand authorities had solved the problem of the harmonious working of the State with the medical profession. He discussed the importance of collaboration between the profession and the health authorities and referred to the recent appointment in England of the Consultative Council to help the Minister of Health. He regarded it as very significant that this Council had power, when its views were not accepted by the Minister, to report directly to Parliament. He was glad that Dr. Blaxland had referred to Dr. Harper's report on the child welfare work in New Zealand. This work was novel and surprising. Dr. Litchfield paid a tribute to the organizing ability and originality of thought of Dr. Truby King. He was afraid that these matters would not be so well managed in New South Wales. When anyone made a special study of an important question of this kind and attempted to institute a reform, the Minister usually butted in and upset everything. He endorsed all that Dr. Blaxland had said concerning the beauties and wonders of New Zealand.

Dr. E. C. Temple Smith expressed his interest in Dr. Blaxland's account of the hospitals, which were said to be largely State aided. He asked whether the general public expected treatment at these institutions irrespective of the individual's social position. Were the staffs honorary? He also wished to know whether any medical practitioner could follow his patients into the hospital.

Dr. J. S. Purdy, D.S.O., spoke in high praise of the health administration of New Zealand. The Health Department had been instituted in 1900 by Dr. J. M. Mason. The activity of the Department had been small at first. There had been a Chief Health Officer and an Inspector-General of Hospitals. More recently the two positions had been amalgamated and were held by the present Chief Health Officer, Dr. Valentine. Health officers were then appointed for each of the four districts. In the early days there had been a hard fight to introduce sanitary reform. In 1908 Auckland possessed practically no system of sewerage with water carriage and much difficulty had been experienced in instituting this system. The only places in which it had been introduced were Cambridge, Hamilton and Rotorua. It had subsequently been installed at Onehunga, Whangarei and Te Aroa, as well as in the majority of the large centres in the rest of the Dominion.

Dr. Purdy maintained that the system of administration of hospitals was admirable. Formerly the medical staffs were honorary. Well-to-do patients did not often apply for admission and it had been found relatively easy to exclude them from hospitals. New Zealand had laws for the registration of nurses and of midwives. These enactments had, to some extent, reduced the puerperal mortality and the infantile death-rate. He was satisfied that Dr. Truby King had performed the most valuable services for New Zealand. His recent appointment was a movement in the right direction, as he would be enabled to extend and amplify his useful work.

Dr. C. A. Edwards stated that when he had visited New Zealand none of these newer projects had been started. In the olden days the medical practitioners were happy to get good fees. Dr. Edwards made some interesting remarks concerning some ornithological work he had carried out in New Zealand. He had collected specimens of the wingless bird, the kiwi. He spoke of the complete series from the wingless bird to the birds of long flight.

In regard to the question of goitre, Dr. Edwards referred to the experience in various districts in regard to its occurrence. It was well known that in some of the valleys in the west of Somerset practically every woman had a goitre, while in other valleys often adjacent to the goitrous valleys, the condition was unknown. The same thing obtained in regard to Christchurch.

Dr. C. Bickerton Blackburn, O.B.E., said that he had enjoyed listening to Dr. Blaxland's paper. When in New Zealand he had visited Rotorua and had had long talks with Dr. Wohlmann, who took a very sane view concerning the therapeutic values of the baths. He did not appear to have been sanguine concerning the prospects of cure of rheumatoid arthritis. Dr. Blackburn's experience taught him that the application of heat locally was of undoubted benefit. He assumed that the bath treatment was a very pleasant method of application. It was necessary, however, to impress upon the patient that while some benefit might accrue from a course of treatment at the New Zealand sulphur baths, rheumatoid arthritis could not be cured in this way. Referring to the New Zealand carvings, Dr. Blackburn thought that it was not so much a question of false modesty as of custom. They all knew that custom required women in the East to cover their faces with veils.

Dr. Blaxland in his reply said that whatever views might be taken in regard to the frequency of nudity in the carvings, they were certainly very beautiful and of high artistic merit. He was not prepared to accept the suggestion that the good Government was due to the Scotch origin of the legislators. At all events, the Scotch element was not very noticeable, either from the speech or the manners of the New Zealanders. He thought that one of the factors which contributed largely to the admirable state of affairs was the exclusion of undesirable people. Another important fact was that great discretion had been shown in regard to the State school teachers. The majority of them had been imported. In reply to Dr. Temple Smith, he pointed out that the medical officers of the hospitals in country districts were paid for their services.

Dr. H. L. Kesteven read a paper by himself and Dr. C. A. Verco on a case of rupture of the coronary artery (see page 416).

Dr. F. Guy Griffiths remarked that this case was very extraordinary. He had not seen anything closely resembling it, although he recalled two cases which bore some remote resemblance. The first was a case of hydatid cyst, if he remembered aright, of the heart. The cyst had ruptured into the pericardium and the patient had died of true heart failure. The second case was one of pulmonary tuberculosis. Large emphysematous bullae were discovered at the edge of the lung in areas free from tubercular disease. One of these bullae had burst, not into the pleura, but into the mediastinum. At each breath more air was forced into the mediastinal tissues. At the post mortem examination the condition found was similar to that of gaseous oedema due to the bacillus of malignant oedema or to Welsh's *Bacillus aerogenes capsulatus*.

Dr. J. G. Edwards referred to four cases of acute ptomaine poisoning affecting both parents and two children in one family. The father had continued to vomit for a considerable

able time and had then died suddenly. After death it was found that there had been a rupture of the coronary artery. He raised the question whether Dr. Kesteven's case might not be explained in the same way.

Dr. C. Bickerton Blackburn had found Dr. Kesteven's paper highly interesting. He was very doubtful whether all these symptoms had been due to the rupture of the coronary artery. He was more inclined to believe that the patient had had syphilis, which had led to the hemiplegia and disease of the coronary arteries. He suggested that the coronary artery had ruptured subsequent to the vomiting. He referred to the case of a girl aged 25 years who had been taken ill suddenly with pain behind the sternum. She was suffering from malignant endocarditis and death took place suddenly from rupture of the coronary artery. He pointed out that a large hæmorrhage into the chest was not necessarily fatal. He had seen a patient with a large aneurysm of the aorta. The patient who had been under observation in hospital for a time, had been discharged improved, but came back a short time later very ill with pain in the chest. The one side of the chest was immobile and much distended. It was suspected that the fluid in the chest was blood and a little later some of the blood was drawn off. The patient had ultimately left the hospital and after three months had improved somewhat in health.

Dr. Kesteven did not accept the suggestion of ptomaine poisoning. There were no acute symptoms of ptomaine poisoning and the patient had not vomited. He did not think that the rupture of the coronary artery was due to vomiting.

Dr. Archie J. Aspinall exhibited an ingenious German field tourniquet and some German field dressings. The latter included a variety of bandages made of paper, many of which were surprisingly strong, paper substitute for absorbent cotton-wool, etc..

Dr. J. S. Purdy exhibited the first field dressing issued to the American troops in 1915.

The undermentioned have been elected members of the New South Wales Branch:—

Bruce McNeil Beith, Esq., M.B., Ch.M., 1916 (Univ. Syd.), Gunnedah.

Athol Walter Mobbs, Esq., M.B., 1909 (Univ. Syd.), Balmain.

Arthur Cecil Moran, Esq., M.B., Ch.M., 1917 (Univ. Syd.), "Rathmines," Jamieson Street, Granville.

George Leigh Tomlinson, Esq., M.B., 1908 (Univ. Syd.), Wyong.

George Francis Louis Elliott, Esq., M.B., Ch.M., 1918 (Univ. Syd.), Short Street, Carlton.

Eric William Beresford Woods, Esq., M.B., Bac. Surg., 1916 (Univ. Melb.), of Albury, has been nominated for election as a member of the New South Wales Branch.

Naval and Military.

The following announcements have appeared in the *Commonwealth of Australia Gazette*, No. 85, of October 15, 1920.

Citizen Naval Forces of the Commonwealth.

Royal Australian Naval Brigade.

Patrick Charles Higgins is appointed Surgeon-Lieutenant as from 1st June, 1920, and in view of his being over the age for compulsory retirement, he is transferred to the Retired List, with the rank of Surgeon-Lieutenant, as from 1st June, 1920, and recalled for temporary duty on the Active List as Sub-District Naval Medical Officer, Townsville.

The following officers belonging to the Force are transferred to the Retired List on the disbandment of the Force:—

Surgeon-Commander Wilfred John Robert Nickson, V.D.

Surgeon-Lieutenant-Commander William Arthur James.

Australian Imperial Force.

Third Military District.

Captain C. T. Andrew, Australian Army Medical Corps, having resigned, his appointment in the Australian Imperial Force is terminated in England on 1st July, 1920, but to take effect from 8th August, 1920.

APPOINTMENTS TERMINATED.

Second Military District.

Captain R. J. Silverton, 23rd September, 1920.
Captain H. H. Jamieson, 23rd September, 1920.
Captain C. Uren, 26th August, 1920.
Captain G. J. M. Saxby, 6th August, 1920.
Captain T. Farranridge, 31st August, 1920.
Captain O. J. Ellis, 25th October, 1920.

Third Military District.

Major R. O. Douglas, 6th September, 1920.

Fourth Military District.

Major E. A. Guymer, 20th August, 1920.
Captain H. W. Davies, 12th August, 1920.

Sixth Military District.

Captain A. R. Waterhouse, 9th September, 1920.

Australian Naval and Military Expeditionary Forces.

APPOINTMENTS TERMINATED.

Second Military District.

Captain W. R. Beavis, 23rd July, 1920.

Australian Military Forces.

First Military District.

Australian Army Medical Corps—

To be Captain—

Honorary Captain A. M. Langan, from the Australian Army Medical Corps Reserve, 2nd Military District, 1st September, 1920.

Second Military District.

Reserve of Officers—

Captains C. G. Allen, T. G. Allen and B. M. Beith to be granted the temporary rank and pay of Major whilst employed at No. 4 Australian General Hospital, 1st March, 1920.

Lieutenant-Colonel J. M. Y. Stewart, C.B.E., D.S.O., to be transferred from the Reserve of Officers, 3rd Military District, 1st September, 1920.

Major R. D. McMaster to be transferred to the Retired List, with permission to retain his rank and wear the prescribed uniform, 1st September, 1920.

Honorary Captain A. M. Langan to be transferred to the Australian Army Medical Corps, 1st Military District, and to be appointed Captain, 1st September, 1920.

Honorary Captain T. E. Parker to be transferred from the Reserve of Officers, 1st Military District, 29th April, 1920. (This cancels the notification respecting this officer which appeared in Executive Minute No. 282/1920, promulgated in *Commonwealth of Australia Gazette*, No. 58, dated 1st July, 1920.)

Third Military District.

Reserve of Officers—

Lieutenant-Colonel J. M. Y. Stewart, C.B.E., D.S.O., to be transferred to the Reserve of Officers, 2nd Military District, 1st September, 1920.

Honorary Captain H. W. Ward to be transferred to the Reserve of Officers, 5th Military District, 1st September, 1920.

Fifth Military District.

Reserve of Officers—

Captain R. C. Bassett to be granted the temporary rank and pay of Lieutenant-Colonel whilst employed at No. 8 Australian General Hospital, 22nd August, 1920.

Honorary Major F. T. A. Lovegrove to be permitted to retain the temporary rank of Lieutenant-Colonel whilst employed at No. 11 Australian General Hospital, 22nd August, 1920.

Honorary Captain I. George to be granted the temporary rank and pay of Major whilst employed at No. 8 Australian General Hospital, 8th August, 1920.

The temporary rank of Major granted to Honorary Captain S. C. Moore is terminated, 7th August, 1920.

Honorary Captain H. W. Ward to be transferred from the Reserve of Officers, 3rd Military District, 1st September, 1920.

AWARDED THE COLONIAL AUXILIARY FORCES OFFICERS' DECORATION.

Australian Army Medical Corps—

Major T. T. Downie.

Captain (Honorary Lieutenant-Colonel) J. E. F. Stewart.

The following appointments have been announced in the *Commonwealth of Australia Gazette*, No. 89, of October 21, 1920:—

**Australian Military Forces.
First Military District.**

To be Lieutenant-Colonel—

Captain G. W. Macarteny, D.S.O. Dated 1st July, 1920.

Fourth Military District.

To be Captain—

Raphael West Clento, 1st July, 1920.

Award of the Colonial Auxiliary Forces Officers' Decoration.

Australian Army Medical Corps.

Lieutenant-Colonel G. W. Barber, C.B., C.M.G., D.S.O.

It is announced that the French Government has awarded the *Légion d'Honneur* to Dr. Reginald L. Davies, O.B.E., of Sydney, for valuable services rendered during the war in the French Army Medical Corps.

Obituary.

FRANCIS HENRY THORNTON.

Francis Henry Thornton was born at Milford, Yorkshire, in 1857. He studied medicine at Saint Bartholomew's Hospital, London, and qualified with the licence of the Society of Apothecaries in 1883. He came to Australia at the age of 56 years and settled in Georgetown, Queensland. Later, in 1915, he took a position at Longreach and in the following year he became Medical Superintendent at the Isisford District Hospital. In 1917 he had a practice at Boulia, Queensland, and was attached to the local hospital. He married the Matron of the Boulia Hospital. In the following year he went to Ballara and in 1919 transferred his activities to Hillston in New South Wales. In May of the present year he was offered the position of Medical Superintendent at the Thargomindah District Hospital. On October 1, 1920, he died. He was a member of the British Medical Association of many years' standing. The fact that he resided in districts far removed from the large cities prevented him from taking a very active part in the affairs of the Association. He was a Freemason. He was very popular in the several places where he practised. His gentle ways and consideration for his patients endeared him to all with whom he came in contact. He worked keenly and assiduously for the welfare of the institutions placed under his care and proved himself an excellent medical officer and reliable medical adviser.

Correspondence.

THE TREATMENT OF EXOPHTHALMIC GOITRE.

Sir: In the issue of the *Journal* dated October 9, 1920, there is an article dealing with exophthalmic goitre by Dr. Stewart McKay.

Because it has been my good fortune to have been closely associated with Dr. Dunhill in his work on this disease from its commencement, I looked forward to reading the article with interest, but this interest soon changed to indignation

when I found an attempt being made to belittle the work that Dr. Dunhill has done and the adoption of a superior tone—almost patronizing because of the possession of knowledge which has not yet dawned on my friend and other Melbourne surgeons. I make no apology for mentioning names; the reference leaves no doubt as to who is intended.

Unfortunately Dr. Dunhill is no longer a Melbourne surgeon. He has left here in a way that few of the profession can hope to do; for that reason I protest strongly against any attempt to have his work belittled or patronized.

Dr. McKay refers to two cases on which he bases his conclusions. The first of these was done ten years ago and one can recall with pleasure the circumstances under which it was done and the indication it gave that the merit of Dr. Dunhill's work was being recognized outside his own city and outside his own State.

At this operation a hemi-thyroidectomy was done; one may conjecture that had Dr. McKay been the operating surgeon at the time, no more than this would have been done, because he states that the secret of success he now claims to possess only dawned on him five years ago; one can even picture him being bold enough to ligate the arteries and expect a cure.

The second operation was done in this case four years ago, and not three as Dr. McKay states. Possibly had Dr. Dunhill not been away on active service in part of 1914 and 1915, it would have been done earlier. Anyway, as the patient improved after the first operation ten years ago and was cured four years ago, I fall to see how he can be correct in stating that disease continued in an active form for the last ten years damaging the heart.

If he watched this patient for some years surely he must be partly responsible if the heart has been damaged, unless he was watching not through the eyes of a medical adviser, but from afar through eyes of green.

With regard to the second case, I would state that unless he was present at this operation, he has no right to conclude that Dr. Dunhill did no more than a hemi-thyroidectomy through lack of knowledge. I maintain that any conclusions he may have formed in reviewing these cases, should not be scattered broadcast without first attempting to see if they were fair and logical.

I would suggest that he read an article that appeared in the *British Journal of Surgery* (Vol. VII., No. 26, 1919, p. 207).

Dr. Dunhill writes:—

"It is to be stated at once and emphatically that the removal of one lobe—one lobe and the isthmus or one lobe with the ligation of a main artery of the opposite—will only cure the disease in a small number of cases. The necessity for removal of the whole of one lobe clearly, the isthmus and quite two thirds of the other, always leaving sufficient for physiological purposes in order to bring about a cure in most cases—but certainly not in all—is recognized by Melbourne surgeons, and for the most part by medical students, quite as fully as is the utter futility of attempting to cure a case of exophthalmic goitre by ligation of the poles of the thyroid."

One word more. From my very fortunate association with Dr. Dunhill and other Melbourne surgeons in this class of work, I can say without fear of contradiction that any surgeon who states that the anæsthetic has ceased to worry him in cases of exophthalmic goitre, no matter what form of anæsthesia is administered, must pick and choose his cases for operation and, as the late Mr. O'Sullivan used to say, the man who is prepared to operate on every case, will ruin his statistics, but save life in the aggregate.

Yours, etc.,

FRANK L. DAVIES.

Malvern,
October 14, 1920.

PREVENTION OF PUERPERAL SEPSIS BY ANTI-STREPTOCOCCIC SERUM.

Sir: In the *Australasian Medical Gazette*, April 25, 1914, there is an article by me on the management of confinements and abortions.

After six years I have one suggestion to make and that is that every case of confinement and every case of abortion (especially if attended by a general practitioner) should

have a preventive dose of polyvalent antistreptococcal serum. I am convinced that the doctor carries the infection far more often than the nurse. In spite of gowns and gloves I have carried infection, sometimes unaware that there was any risk of infection.

One morning I saw Mrs. G., who did not seem very ill. There was no pyrexia, no alteration of pulse rhythm, no local signs, but she felt out of sorts.

Leaving her I went straight to a confinement, Mrs. W. Next day, to my horror, I found Mrs. G. had a temperature of 102° F. and well marked facial erysipelas. I promptly gave Mrs. W. 10 c.c.m. of antistreptococcal serum and she remained perfectly well.

Mrs. G. had a smart attack of erysipelas, which rapidly cleared up after the injection of 60 c.c.m. (in four doses) of antistreptococcal serum.

Lately I have had many cases, some of erysipelas, some of poisoned wounds, some of sore throats, which all cleared up rapidly after injections of antistreptococcal serum.

I lost a case of puerperal septicæmia, when another confinement case and an abortion case got pyrexia; injections of antistreptococcal serum were given and they rapidly recovered.

So I started giving 10 c.c.m. to every woman who was confined or aborted. Not one of those so treated has had the least rise of temperature or any sign of ill health.

It was found necessary in France to give every wounded soldier antitetanic serum to prevent the onset of tetanus. It appears to me to be necessary to give a dose of antistreptococcal serum to every parturient woman to prevent sepsis.

No general practitioner can be sure that he does not carry infection. The injection gives very little pain to the patient or trouble to the doctor.

It is not costly and is likely, not only to materially reduce the death rate from puerperal sepsis, but also to prevent a great deal of ill health that is caused by puerperal sepsis.

The serum I use is the polyvalent antistreptococcal serum made at the Commonwealth Serum Laboratories, Melbourne.

Yours, etc.,

EDWARD. E. MOULE.

Wagin, Western Australia,
October 4, 1920.

ANÆSTHETICS ADMINISTERED BY DENTISTS.

Sir: In your issue of September 25 is a letter by Dr. C. E. Corlett in which he charges me with presenting careless and unverified statements and sets up an instance of a dentist practising in Oxford Street, Sydney, who had a death during the administration of ethyl chloride by him and goes on to say that the date could be easily found in the Coroner's records. I have made application to the Department of Justice, and have received from the Under-Secretary a letter of which a copy follows.

Yours, etc.,

W. STEWART ZIELE.

185 Macquarie Street, Sydney,
October 20, 1920.

Department of the Attorney General and of Justice,

Sydney, October 18, 1920.

Dear Sir: In reply to the inquiry contained in your letter of the 6th instant I beg to inform you that there is no record at the City Coroner's Office of a death under an anæsthetic administered by a dentist. There have been fifty (50) magisterial inquiries between the 1st January, 1914, and the 8th October, 1920, regarding deaths under anæsthetics administered by medical men within the district of Sydney, but no record was kept of the nature of the anæsthetic.

Yours faithfully,

(Sgd.) G. WHITEFELD,

Under Secretary of Justice.

DEATH-RATE IN THE NORTH.

Sir: My attention has been called to a supposed statement of mine "quoted" by Dr. T. A. Nisbet in his remarks at the

Australasian Medical Congress (*The Medical Journal of Australia*, September 18, p. 295). He said that I "had stated that it was a rare exception to find an individual who expected to live in old age and die in North Queensland." This was "quoted" with a view to showing that the favourable death-rate figures for North Queensland are fallacious, as the old people go south to die. I have not, to my knowledge, had the honour of conversing with Dr. T. A. Nisbet, so cannot well have made the remark to him. I can only suppose he is referring to a quotation made by me in the course of my annual school report for the year 1912, which was reprinted, under the title "A Plea for the North," in the *North Queensland Register* and led to a newspaper controversy between the late Dr. Nisbet and myself. "I've never yet found," said an old resident to me not long since, "a single individual who is content to die in Townsville. And yet," he added meditatively, "we have had to open a new cemetery." You will note that I quoted the remark to suggest that the majority of residents did ultimately die here; Dr. T. A. Nisbet (who omitted the second sentence) to suggest that they did not.

I enclose you a copy of "A Plea for the North." I think you will agree with me that I have some justification for being annoyed at being quoted as evidence on the opposite side.

Yours, etc.,

P. F. ROWLAND, M.A. (Oxon.),
Headmaster, Townsville Grammar School.

Townsville,

October 18, 1920.

Proceedings of the Australian Medical Boards.

VICTORIA.

The undermentioned have been registered as legally qualified medical practitioners under the provisions of Part I. of the *Medical Act, 1915*:—

Harold Victor Cantor, M.B., B.S., Melb., 1920, High Street, Northcote.

Eric Meudel Ettelson, M.B., B.S., Melb., 1920, "Minden," Albany Road, Toorak.

The name of the late Thomas Bunnett Lewers has been removed from the register.

QUEENSLAND.

The undermentioned have been registered under the provisions of the *Medical Act, 1867*, as duly qualified medical practitioners:—

Anderson, Noel Alexander Lewis, M.B., Ch.B., Univ. Melb., 1920 (Brisbane).

Barlow, Charles Dight, M.B., Ch.M., Univ. Syd., 1918 (Georgetown).

Douglas, Robert Oliver, M.B., B.S., 1911; M.S., 1913, Univ. Melb. (Toowoomba).

Harley, Alfred William, M.B., B.S., Univ. Melb., 1918 (Brisbane).

Hatherell, Robert Ratcliffe, L.S.A., Lond., M.R.C.S., Lond. (Clifton).

Langan, Alfred Meillon, M.B., Ch.M., Univ. Syd., 1919 (Cairns).

Prot, Howard Andrew, M.B., Ch.M., Univ. Syd., 1920 (Townsville Hospital).

Steel, Walter Henry, M.B., B.S., Univ. Melb., 1918 (Stanthorpe).

Telford, Robert Whitson, M.B., Ch.M., L.R.C.P. and S., Edin., 1905, M.D., 1909, D.P.H., Camb., 1912 (Miles).

Books Received.

DIAGNOSTIC METHODS, CHEMICAL, BACTERIOLOGICAL AND MICROSCOPICAL: A Text-Book for Students and Practitioners, by Ralph W. Webster, M.D., Ph.D.; Sixth Edition, Revised and Enlarged; 1920. Philadelphia: P. Blakiston's Son & Company; Royal 8vo., pp. 844, with 37 coloured plates and 170 other illustrations.

MANUAL OF OPHTHALMIC PRACTICE (Based on Lectures Delivered at the Medical College, Calcutta), by F. P. Maynard, M.B., D.P.H., F.R.C.S.; 1920. Calcutta and Simla: Thacker, Spink & Company; Second Edition; Royal 8vo., pp. 316, with 12 plates and 133 illustrations. Price, 12 rupees.

- MANUAL OF OPHTHALMIC OPERATIONS**, by F. P. Maynard, M.B., D.P.H., F.R.C.S.; 1920. Calcutta and Simla: Thacker, Spink & Company; Second Edition; Royal 8vo., pp. 246, with six stereoscopic plates and 137 illustrations. Price, 9 rupees.
- DENTAL DISEASE AND PUBLIC HEALTH**, by Thomas T. Alkin (Embodying Part of Preliminary Report upon Dental Disease and Education as to the Prevention of Mouth Infections and Pyorrhea, secured by authority of the late Nationalist Government of New South Wales); Sydney: Angus & Robertson, Limited; Demy 8vo., pp. 58. Price, 1s. 6d.
- VACCINATION IN THE TROPICS**, by W. G. King, C.I.E.; 1920. London: Tropical Diseases Bureau; Royal 8vo., pp. 64, illustrated. Price, 6s. net.
- CATECHISM SERIES: SURGICAL ANATOMY**, Second Edition, Part II.; 1920. Edinburgh: E. & S. Livingstone; Crown 8vo., pp. 144. Price, 1s. 9d.

Medical Appointments.

It is announced in the *Victoria Government Gazette* of October 13, 1920, that Dr. H. W. Lording (B.M.A.), Dr. P. G. Clarke (B.M.A.) and Dr. N. A. Albiston (B.M.A.) have been appointed public vaccinators for Carnegie, Mentone and Port Fairy respectively.

Dr. Thomas Wilson (B.M.A.) has been appointed District Medical Officer and Public Vaccinator at Port Hedland, Western Australia, and Visiting District Medical Officer at Marble Bar.

Dr. F. L. Gill (B.M.A.) has been appointed Medical Officer of Health of the Municipal Council of Subiaco, Western Australia.

Dr. W. R. C. Beeston (B.M.A.) has been appointed additional certifying surgeon for the Newcastle District Court District (New South Wales) under the provisions of the *Workmen's Compensation Act, 1916*.

Dr. R. Wreyford Lawrence (B.M.A.) has been appointed a certifying medical practitioner at Beechworth, Victoria, under the provisions of the *Worker's Compensation Act, 1915*.

Dr. John Johnston will take the position and carry out the duties of Chief Health Officer of the Commission of Public Health of Victoria, during the temporary absence of Dr. Edward Robertson (B.M.A.).

For the purposes of *The Health Acts, 1900 to 1917*, Dr. A. W. G. Murray (B.M.A.) has been appointed Government Medical Officer and a Health Officer at Ayer, Queensland.

Medical Appointments Vacant, etc.

For announcements of medical appointments vacant, assistants, locum tenentes sought, etc., see "Advertiser," page xxvii.

The University of Melbourne: Lecturer in Obstetrics and Gynaecology.

Department of Public Instruction, Victoria: Medical Officer.
The Medical Journal of Australia: Half-time Assistant to Editor.

Medical Appointments.

IMPORTANT NOTICE.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
NEW SOUTH WALES. (Hon. Sec., 30-34 Elizabeth Street, Sydney.)	Australian Natives' Association. Ashfield and District Friendly Societies' Dispensary. Balmmain United Friendly Societies' Dispensary. Friendly Society Lodges at Casino. Leichhardt and Petersham Dispensary. Manchester Unity Oddfellows' Medical Institute, Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. North Sydney United Friendly Societies. People's Prudential Benefit Society. Phoenix Mutual Provident Society.

Branch.	APPOINTMENTS.
VICTORIA. (Hon. Sec., Medical Society Hall, East Melbourne.)	All Institutes or Medical Dispensaries. Manchester Unity Independent Order of Oddfellows. Ancient Order of Foresters. Hibernian Australian Catholic Benefit Society. Grand United Order of Free Gardeners. Sons of Temperance. Order of St. Andrew. Australian Prudential Association Proprietary, Limited. Mutual National Provident Club. National Provident Association.
QUEENSLAND. (Hon. Sec., B.M.A. Building, Adelaide Street, Brisbane.)	Australian Natives' Association. Brisbane United Friendly Society Institute. Stannary Hills Hospital.
SOUTH AUSTRALIA. (Hon. Sec., 3 North Terrace, Adelaide.)	Contract Practice Appointments at Renmark. Contract Practice Appointments in South Australia.
WESTERN AUSTRALIA. (Hon. Sec., 6 Bank of New South Wales Chambers, St. George's Terrace, Perth.)	All Contract Practice Appointments in Western Australia.
NEW ZEALAND: WELLINGTON DIVISION. (Hon. Sec., Wellington.)	Friendly Society Lodges, Wellington, New Zealand.

Diary for the Month.

- Nov. 1 to 10.—Vic. Branch, B.M.A.; nominations of candidates received for election to Council.
- Nov. 5.—Q. Branch, B.M.A..
- Nov. 9.—Tas. Branch, B.M.A..
- Nov. 9.—N.S.W. Branch, B.M.A., Ethics Committee.
- Nov. 10.—Vic. Branch, B.M.A..
- Nov. 11.—Vic. Branch, B.M.A., Council.
- Nov. 11.—Q. Branch, B.M.A., Council.
- Nov. 12.—N.S.W. Branch, B.M.A., Clinical.
- Nov. 12.—S. Aust. Branch, B.M.A., Council.
- Nov. 16.—N.S.W. Branch, B.M.A., Executive and Finance Committee.
- Nov. 16.—Illawarra Suburbs Med. Assoc. (Annual).
- Nov. 17.—W. Aust. Branch, B.M.A..
- Nov. 17.—North Eastern Med. Assoc. (N.S.W.).
- Nov. 23.—N.S.W. Branch, B.M.A.; Medical Politics Committee; Organization and Science Committee.
- Nov. 23.—Vic. Branch, B.M.A.; ballot papers issued for election of office-bearers of Branch.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this journal cannot under any circumstances be returned.
 Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.
 All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney. (Telephone: B. 4635.)